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ELEMENTS OF PEDAGOGICS

BY

J. N. PATRICK, A. M.

AUTHOR OF "LESSONS IN ENGLISH" AND "ESSENTIALS OF ENGLISH"

*Man cannot propose a higher and holier object for his study than education
and all that pertains to education.—Plato*



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PREFACE.

The elementary principles of pedagogics are easily within the comprehension of any one otherwise qualified to teach the common school branches. With the unsolved problems of psychology the school teacher is not concerned. But to teach any subject properly requires some knowledge of the laws which govern the growth of mind. In this book special pains have been taken to apply the principles of pedagogics to the practical work of the school room.

“Elements of Pedagogics” is not a pretentious book. It is intended for those who have not already studied pedagogy, hence it aims to state concisely, clearly, and simply the well-established principles and facts of educational psychology and correct methods of instruction, yet no attempt has been made to make the subject light and easy, for the study of mental phenomena presupposes thoughtful habits of study in the reader.

Into the foot notes are gathered quotations from Sully's "Outlines of Psychology," Ladd's "Psychology," Dewey's "Psychology," James's "Psychology," Hill's "Psychology," Van Norden's "Psychic Factor," and from Spencer, Rosenkranz, Compayré, Hughes, Fitch, Rooper, Sidgwick, Thring, Locke, Page, Brooks, and White. The inquiring teacher is respectfully referred to the completer works of the authors here named for more professional light upon his chosen work.

For convenience of treatment the text is divided into two parts: Part *First* aims to present the elementary principles of educational psychology; part *Second* discusses the leading topics of practical pedagogics. In spirit and purpose this little book is strictly educational.

J. N. P.

ST. LOUIS, January, 1894.

CONTENTS.

	PAGE.
PREFACE	iii-iv
CONTENTS	v-vi

PART FIRST.

EDUCATIONAL PSYCHOLOGY	7-86
----------------------------------	------

CHAPTER I.

SENSATION—PERCEPTION	8-17
--------------------------------	------

CHAPTER II.

MEMORY IN EDUCATION	18-33
-------------------------------	-------

CHAPTER III.

IMAGINATION IN EDUCATION	34-47
------------------------------------	-------

CHAPTER IV.

ASSOCIATION IN EDUCATION	48-57
------------------------------------	-------

CHAPTER V.

ATTENTION IN EDUCATION	58-70
----------------------------------	-------

CHAPTER VI.

CONCEPTION	80-87
----------------------	-------

CHAPTER VII.

JUDGMENT—REASON	88-96
---------------------------	-------

PART SECOND.

PRACTICAL PEDAGOGICS	97-224
--------------------------------	--------

CHAPTER VIII.

HABIT IN EDUCATION	98-113
------------------------------	--------

CHAPTER IX.

METHOD IN EDUCATION	114-125
-------------------------------	---------

CHAPTER X.

METHOD IN EDUCATION (CONCLUDED)	126-143
---	---------

CHAPTER XI.

THE RECITATION	144-153
--------------------------	---------

CHAPTER XII.

THE SCHOOL	154-171
----------------------	---------

CHAPTER XIII.

THE TEACHER	172-183
-----------------------	---------

CHAPTER XIV.

MORAL EDUCATION	184-201
---------------------------	---------

QUESTIONS	202-204
---------------------	---------

CHAPTER XV.

THE IDEAL LIFE	205-224
--------------------------	---------

PART FIRST.

EDUCATIONAL PSYCHOLOGY.

The lower animals are born with an almost complete adaptation for the performance of their life functions. The colt stands when only a few hours old. At the age of three, he can do almost all he can ever do in his life-time. It is not so with a human infant. For years it is absolutely dependent on others for the continuance of its existence. No living creature is more ignorant, more defenseless, more entirely at the mercy of beings other than itself. Destined for the highest attainments of intelligence, the infant possesses the least of automatic adaptation to the conditions of life. Everything has to be learned from the beginning. Instinct is at the minimum, Intellect, undeveloped but potential, is at the maximum. Almost everything done by the child is done by conscious psychical reaction, not mechanically.—*Hill's Psychology.*

CHAPTER I.

SENSATION—PERCEPTION.

INTRODUCTION:—The soul is the *self*—the life essence. It is that which knows, feels, and wills. It exists, and knows that it exists. The body is, but it does not know that it is. The body is a thing, the soul a spirit. The relation existing between the soul and the body is one of co-existence, not of identity. Matter and mind are essentially different. Matter is known by its quality, mind by its acts; matter is inert, mind self-active; matter is unconscious, mind self-conscious; matter occupies space, mind does not; matter is particular, mind universal. The body and the soul reciprocally condition each other. They work together involuntarily. The origin and nature of both matter and mind are

beyond the limits of science. We can study the phenomena of the soul, but not its nature.

I can exist apart from my body, for my body is not *I*. My body might be torn to pieces, but I should still be spiritually entire. The distinction is self and not-self—*Ego* and *non-Ego*. The soul is a unit in all of its actions; that is, it does not act in sections.* As *intellect*, it knows; as *sensibility*, it feels; as *will*, it chooses and puts forth volitions. *Feeling* includes all pleasurable and painful conditions of the mind. *Willing* covers all active mental operations. However, *knowing*, *feeling*, and *willing* are not three different kinds of consciousness, but three different modes of the same consciousness. All three of the elemental powers of the soul are involved in every conscious act.†

*In Psychology, Mind is considered as an *Individual*; that is, as an *indivisible unit of Energy*. As such it has many *modes*, clearly *distinguishable*, but wholly *inseparable* from one another.

From its very nature as an indivisible unit of Energy, Mind acts always as *one*. All its modes are involved in every act, one or another mode being *predominant* in each act.—*Bryant's Psychology*.

†Mental phenomena are known by different names. They are commonly called *states of mind*, or *states of consciousness*. Since, how-

Psychology is the science of the mind. It is a science, because it is based upon knowledge derived from experience. The art and science of teaching are based upon the laws of psychology. Sound methods of instruction can be acquired only through a knowledge of the principles upon which they are based. If we would know how to impart instruction, we should know how knowledge is acquired. A study of the elements of knowledge naturally precedes a formal study of the principles of pedagogics.

The process of acquiring knowledge begins with consciousness of the *self*. Self-consciousness is the foundation of all other knowledge. It discriminates between being and non-being; between the self and the not-self; between the *Ego* and the *non-Ego*. The facts of psychology

ever, they are phenomena in time, having a certain duration and a succession of parts, they are just as often spoken of as mental processes or operations. It is important, further, to distinguish between a mental process, or operation, and its result, or product. Thus we distinguish between a process of perception and its result, a percept; a process of association and suggestion and its product, a recollection; between an operation called reasoning and its result, rational conviction, and so forth.—*Sully*.

are facts of the *self*; they are individual experiences. All other sciences deal with the not-self; hence the facts of all other sciences are the common property of all men. Since the facts of the soul are personal experiences, it follows that a knowledge of its operations is best acquired by introspection—by a study of how the *self* acquires knowledge. The elements of knowledge are sensations and perceptions.

SENSATION.—“A sensation is a change in the state of the mind produced by an impression upon an organ of sense.” Sensation has a physical basis, but is a mental state.* The nerves connect the soul with the material world. It is through the senses that the soul acquires a knowledge of the outer world. Each sense has its own special mode of

* Sense-impressions are the alphabet by which we spell out the objects presented to us. In order to grasp or apprehend these objects, these letters must be put together after the manner of words. Thus the apprehension of an apple by the eye involves the putting together of various sensations of sight, touch, and taste. This is the mind's own work, and is known as perception. And the result of this activity, *i. e.*, the distinct apprehension of some object, is called a percept.—*Sully*.

receiving and conveying its sensations. All parts of the body supplied with nerves give rise to sensations. Without one or more of the five senses, there would be no mental life. A person born blind is deprived of the sensations and images dependent upon the sense of sight; one born deaf is deprived of the sensations dependent upon the sense of hearing. The same statement may be made in regard to the other senses. Arranged in the order of their importance, the special senses are sight, hearing, touch, taste, and smell.

The senses supply the material for knowledge. That is, without the senses nothing would be perceptible; and without the conscious *self* nothing would be perceived. The soul depends upon the body for its communication with the external world. It is through external excitants that the nervous organism receives the impressions that it transmits to the soul. There can be no sensation without a nervous system and a stimulation of that system. But

a sensation is not knowledge. Knowledge is interpreted sensations. Merely to see, feel, hear, taste, and smell is not knowing.* A sensation is only one element of knowledge—the initial act of the soul in acquiring knowledge.

PERCEPTION.—“Sense-perception is the soul’s knowledge of material objects.” A percept is a psychical image formed by the idealization of sensations. It is the image of an object or of a group of objects. But a percept is not knowledge; it is only another element of knowledge—the second stage in the progress of acquiring knowledge. Knowledge is a fusion or an assimilation of percepts. The mere sight of an orange does not constitute knowledge of an orange. The percept given by the sense of sight must be fused with the percepts given by the sense of taste, the sense of smell, the sense of touch. Only by unifying these

* We hear only what we know.—*Goethe*.

We can see only what we have been trained to see.—*Carlyle*.

The present impression produces only such an effect on the mind as the past history of the mind renders possible.—*Rousseau*.

several sensations do we acquire knowledge of an orange.

Sensation and Perception are mental states—stages in the development of knowledge. A little thinking will show that complete knowledge of an object cannot be obtained through a single sense-perception. Knowledge of a rose cannot be obtained through any one sense, but only by the fusion of several individual percepts. To the percept formed by the sense of sight must be added the percepts formed by the senses of touch, taste, and smell. Knowledge of an apple is obtained only by seeing it, feeling it, smelling it, and tasting it. Knowledge of an object is the synthesis of all its individual percepts. This fact should be thoroughly understood by teachers, that pupils may enjoy the pleasure which study gives when properly directed.

Since the material for knowledge is acquired through the senses, it follows that the quality of the percept depends upon the quality of the sensations. The depth of the image depends

upon the intensity of the sensation.* Attention, interest, and feeling on the part of the pupil accompany all successful efforts to acquire knowledge. Pupils must be trained to see, to hear, to feel, to smell, and to taste, if they would acquire clear and lasting percepts. Listless habits of the mind and restless habits of the body tend to weaken the image; hence the teacher should insist upon an attentive mind and a quiet body during recitation. Tact and energy on the part of the teacher are as necessary as attention and interest on the part of the pupil. Teacher and pupil influence each other.

As knowledge cannot be conveyed directly from

*REPRESENTATION.—But a percept really becomes matured as such only through successive stages. An object must be seen many times before it is *rightly* seen. And *repetition* means *retention*.

A percept is developed through repeated acts of perception into clearness and accuracy and adequacy. And for each of those repeated acts of perception, through which are brought about the correction and deepening of a *percept* already partially formed in the mind, a new act of perception of similar character is primarily the necessary occasion.

The character of the perception in any given case depends upon that of the sensation, as this in turn depends upon the character of the stimulus which the sense-organ is suited to transmit.—*Bryant's Psychology*.

one mind to another, but must be acquired, it follows that the quality of the elements of knowledge—sensations and perceptions—is of the greatest importance. As knowledge cannot be imparted by teacher to pupil, it follows that telling is not teaching, and that learning is not education. Education is self-evolution. All that man ever had, he acquired. Moral, intellectual and physical conditions are growths, not gifts. If it were possible for the teacher to *pour* knowledge into a pupil, the pupil would not be greatly enriched by the gift. One may awaken in another a percept, but the awakened image or idea is a personal creation, the result of the self-activity of the soul.

The next higher stage of knowledge is memory, which may be defined as *knowledge of particular things or events once present, but no longer so*. Memory consequently removes one limitation from knowledge as it exists in the stage of perception: the limitation to the *present*. The world of strict perception has no past nor future. Perception is narrowly confined to what is immediately before it. Memory extends the range of knowledge beyond the present. The world of knowledge as it exists for memory is a world of events which *have* happened, of things which have existed. In short, while the characteristic of perception is *space* relations, that of memory is *time* relations. Knowledge, however, is still limited to individual things or events which have had an existence in some particular place, and at some particular time.—*Dewey*.

CHAPTER II.

MEMORY IN EDUCATION.

“Memory is the faculty of the mind by which it retains the knowledge of previous thoughts, impressions, and events.” It is the re-presentation of a past experience—the knowing over again. The image which memory recalls represents mentally what was once experienced. The memory of a pain is not a pain; the memory of an odor is not an odor; the memory of the face of a friend is not a face. That which we retain is a constitutional fact; how we do it, no one knows. The mystery of recalling is no greater than the mystery of perceiving. That we recall knowledge of persons, impressions from nature, and events in time, no one will deny. Reproduction is an intellectual process. It is independent of sensation.

Memory acts upon suggestion ; hence the value of association in education. The mind tends to modes similar to previous modes. We are even unconsciously tempted to do what we have done, and to do it in the same manner. The desire to repeat a past experience depends upon the frequency and intensity of the past experience. It is also quite evident that the power to recall an image, fact, or expression, depends upon the depth of the original impression—upon the attention given to it and the feelings aroused by it.* This fact bears directly upon method in instruction. It suggests interest and definiteness.

Reproduced impressions are similar to the original impressions, but weaker. Time weakens all kinds of impressions, but does not destroy them. The distinctness of the recalled image, or im-

* Our ability to recall knowledge in the future, depends largely upon the *circumstances* of its acquisition. Such physical conditions as general good health and vigor of brain are conducive to permanent acquisitions, while disease and weakness are obstructive. Psychical conditions, such as interest in the subject and attention to details, also affect the durability of knowledge. There is, moreover, the essential condition of sufficient time for distinct impressions to be made and for a certain amount of repetition.—*Hill's Psychology*.

pression, depends upon the clearness with which it was first stamped upon the mind. The report of a cannon is more fully recalled than the report of a pistol; an object of bright color, more distinctly than one merely tinted; an elephant, more vividly than a sheep; a face of irregular features than one of regular features. This fact of every day experience is full of suggestion for teachers. It suggests that instruction should be clear, concise, and impressive.

Images recalled by memory are always less vivid than percepts. "Percepts," says Spencer, "are *vivid* states of consciousness; memories are *faint* states of consciousness." It is self-evident that the vividness of the recalled image depends upon the character of the percept. In recalling the face of a friend, the distinctness of the features depends upon the definiteness and depth of the percept. In like manner, the pupil's power to recall a fact, illustration, or principle depends upon the definiteness and the depth of the original impression. Flitting impressions—the mere

recitation of the words of the text-book—are not long held by the memory.* We recall what we have seen more readily and more clearly than what has been described to us. In the first instance, we recall an *experience*, in the second, a description—a verbal image. Upon this fact rests the superlative value of illustration in teaching.

In some schools, pupils learn much they do not know—much they never know. The mere ability to recite text-book matter is not a test of the pupil's knowledge of a subject. The pupil who knows, *feels* that he knows. The pupil who has mere learning only *believes* he knows. Belief is

* Permanence of an impression is determined not merely by its external character, but by the attitude of the mind in relation to it. If our minds are preoccupied, even a powerful impression may fail to produce a lasting effect. Hence we have to add that the permanence of an impression depends on the degree of interest excited by the object, and the corresponding vigor of the act of attention. All strong feeling gives a special persistence to impressions, by arousing an exceptional degree of interest. Where a boy is deeply affected by pleasurable feeling, as in listening to an attractive story or in watching a cricket match, he remembers distinctly. Such intensity of feeling, by securing a strong interest and a close attention, insures a vivid impression and a clear discrimination of the object, both in its several parts or details, and as a whole. And the fineness of the discriminative process is one of the most important determining conditions of retention.—*Sully*.

passive. It is valueless till it bears fruit in knowledge. Belief is theoretical; knowledge, experimental. Life has meaning only in action. Interest, feeling, and experience relate us to God and man.

No definite rules can be given for training the memory. The teacher must understand and apply the laws of association; he must properly connect the several parts of the new matter, and connect the new with the old. Unrelated facts cannot be remembered; they would have little or no value if they could be recalled. Although there are no specifics for training the memory, proper methods do much to develop and strengthen it.

INTEREST TRAINS MEMORY.—The attitude of the mind during the recitation determines the character of the impression. If the pupil is not interested and attentive, the impression, if any, will be weak and transient. Uneasy and restless physical habits disturb the mind;* hence

* The mental attitude of attention is accompanied by cessation of bodily movement. When during a walk we try to think closely, we involuntarily stand still.—*Sully*.

pupils should sit or stand still during recitation. Education should train both body and mind.

ATTENTION TRAINS MEMORY.—As memory is the re-presentation of a past experience, it follows that its power to recall an image, fact, or event, depends upon the character of the original impression. Memory cannot create anything new; it recalls the old. As it can recall only what was once experienced, it follows that its trustworthiness is due to the character of the experience. Recalling is wholly an intellectual process in reviving and reconstructing. This fact bears directly upon instruction. Instruction without attention is an empty, valueless formality. Retention depends upon attention. If the mind of the pupil is pre-occupied, stop the recitation or send the wandering pupil to his seat. As pupils *attend* with more interest in the higher than in the lower grades, reviews are less important in the higher than in the lower branches.

REPETITION TRAINS MEMORY.—Repetition deepens impressions, and awakens similar con-

cepts. The value of repetition depends upon the intensity of the act of repetition and the frequency of the same. Repetition is a form of emphasis; the greater the number of impressions, the more lasting the image. A single occurrence seldom makes a lasting impression, especially upon young children whose minds are readily engaged by the passing events of the hour.* But mere automatic repetition, parrot-like and unfeeling, has little or no value. The purely formal and mechanical does not create feeling, hence has little educational or moral value. A distinct and lasting impression requires attention, interest, and purpose on the part of the learner; hence, the closer the attention and the deeper the feeling, the fewer the repetitions necessary to fix the image in the mind. The soul is awakened and stimulated only by its own action. Negative instruction does not inspire. Immature convic-

* Interest is rarely so keen as to be able to dispense with a number of repetitions. On the other hand, no number of repetitions of a lesson will avail if there is no interest taken in the subject, and the thoughts wander.
—Sully.

tions do not create feeling. Earnestness in a teacher begets earnestness in the pupil.

UNDERSTANDING TRAINS MEMORY. — “Get wisdom, but with all thy getting, get understanding.” But little interest attaches to what we cannot understand. This is unqualifiedly true of subjects within the comprehension of man. The memory is more tenacious of those images, thoughts, and experiences which appealed to the reason than of those which were merely formal. A clear understanding greatly aids in recalling. Thought is more impressive than formal words. Reality is more lasting than symbols. Mechanical memorization is likely to fail just when needed. It has no mental associations. It does not reach the soul; hence it is not trustworthy.

IMPORTANT ASSOCIATIONS TRAIN MEMORY. — Important events naturally strike the mind with more force than minor ones; hence they are more easily retained, and more readily recalled. The minor events attach themselves

to the more important ones, in accordance with some law of intellectual gravitation, and thus survive by sufferance. Insignificant incidents become part of a mass concept. This fact is only a re-statement of a principle of association. Nothing can be recalled which is not in some way associated with what is present in the mind. "The fact narrated must correspond to something in me, to be credible or intelligible." The power to recall or recognize, therefore, depends upon the association of ideas. Memory leans upon association.

USE TRAINS MEMORY.—Exercise is a means of strength, whether physical, intellectual, or moral. Trustworthiness of memory is a growth. Memory is most active and spontaneous in childhood. But the memory of childhood is mechanical. A child simply remembers ; he does not seek to know *how* or *why*. This fact suggests method in instruction. It suggests that the mechanical element in reading, writing, and the fundamental rules in arithmetic should be mastered before the

how or *why* are required. In the later years, reason plays a more important part in education. Each faculty of the mind should be trained in the order of its natural growth. The faculty which is most used is the readiest and strongest.

EQUALITY OF IDEAS WEAKENS THE MEMORY.

In teaching, preference should be given leading facts, principles, and events. Instruction without discrimination is hardly training in an educational sense. Equalizing facts and principles prevents the mind from dwelling upon the important ones. It masses the ideas. This fact is another argument against burdening the memory with unimportant matter and detail.

The value of a retentive memory is incalculable. It is now too generally held that great creative power is incompatible with strong memory. But it is simply absurd to claim that the power to recall weakens the power to create. Many of the greatest intellects have been men of extraordinary memories. Hamilton and Macaulay, Jefferson and Lincoln, Garfield and Car-

lyle were remarkable for the trustworthiness of their memories. It is the abuse of memory in our cram methods of instruction which has given memory a false place in the "new education." Stuffing pupils with isolated facts for per cents not only abuses the memory, but weakens it.

Where sound methods of instruction are used, the memory needs little or no special training.* If knowledge is acquired in accordance with the well-established principles of intellectual development, the memory will receive its due share of

*The value of the memory in relation to the understanding of facts and the practical applications of knowledge should never be lost sight of. In training the memory, the teacher should exercise the judgment at the same time in the selection of what is really important. In this way overloading the mind will be avoided, and the higher faculty will be improved.—*Sully*.

The chief thing for the teacher to keep in mind is that the training of memory is, to a very large degree, training in original apperception—in apprehension and assimilation of what is to be remembered. It may be laid down as a rule: Do not aim at training memory directly, but indirectly, through the training of the apperceiving powers. The attitude of the pupil's mind should be: I must *perceive* this just as it is and in all its bearings; not, I must *remember* this. If the original perception, in other words, is what it should be, accurate, comprehensive and independent, memory may be left very largely to take care of itself. For the first step in remembering anything is to get it within the mind, and apperception is just this getting it within the mind. If this is thoroughly done, the first step in memory is already taken, and it needs no special training of its own.—*McLellan's Psychology*.

attention. But where the laws of mental growth are unknown or ignored by the teacher, special training may be needed. Pupils who cannot "recollect" should be required to commit complete selections, prose and poetry. Only the choicest selections should be committed. Selections containing vigorous thought are not only more readily committed, but more easily retained.

Retention is the outgrowth of perception. Perception associates us with the present, memory with the past. Perception ends with space relations; memory extends to time relations. Perception is the result of physical experience; memory of intellectual experience. Perception recognizes actual, present existence; memory, ideal, past experience. The book I see on the table is actually there; the book I saw on the table yesterday is ideally there. I am related to one through experience—by the sense of sight; to the other through the memory. Memory is the foundation of intellectual growth. "It unites the successive elements of soul life."

Without memory, life would be limited to the single moment of the present. There would be no past. If we could not recollect, we should have nothing for the mind to work upon.* Everything we learn is held by the mind, in some mysterious way, in the form of impressions. If we could not reason about the past we could not interpret the present. But the use of memory does not imply merely verbal repetition of the thoughts of others. The memory has a higher function than recitation. Recalling is really a constructive process. The experiences of the

*The senses are the source of all our knowledge about external things. But, if we were only capable of observing objects, we could gain no lasting knowledge about anything. Knowledge of things is not a momentary attainment, vanishing again with the departure of the things; it is our enduring possession, which we can make use of at any time, whether the objects are before us or not.—*Sully*.

The dependence of all the higher powers of Intellect upon Memory hardly requires illustration. Our immediate knowledge is confined to a very narrow circle of facts, and does not afford us a very extended illustration of general principles. It is through our recognition of past knowledge that we are able to interpret and understand even the little which the present furnishes. It is through acts of Memory that we are able to detect those resemblances upon which all our generalizations are built. Through the aid of Memory we exercise that function of Assimilation which broadens and deepens the knowledge acquired through the function of Discrimination. It enables us to interpret the present in the light of the past.—*Hill's Psychology*.

past are past, and can be recalled only by reconstructing them.

Memory is the store-house which supplies all the other activities of the mind with aliment. Without the memory, the educator could do little or nothing. In education, no other faculty of the mind is drawn upon so often. It is simply absurd to decry the memory because some teachers abuse it; it is absurd to undervalue the office of memory because in some schools memoriter recitations pass for real ones. Memory has its place in education. It is a settled fact in *Pedagogics* that the cultivation of the memory is not only possible but practicable, and that the only way to cultivate it is to use it. The discredit into which memory has fallen with some teachers is chiefly due to a confusion between memory work proper and mere repetition.

The power to retain knowledge depends upon how the knowledge is acquired—upon the methods of instruction. It depends upon a practical application of the laws of association—upon nat-

ural laws.* Nature is always helpful, if we approach her in the right way, and at the right time. The application of these psychological laws to instruction is too obvious to need further elaboration or illustration. The need of teachers is a thorough grounding in the elementary and essential principles of educational psychology. With these well in hand, the detail which logically clings to them will take care of itself. The greater contains the less.

* The association of ideas is one of the essential laws of the development of the memory, in the sense that our recollections are connected with one another, that their connection fixes them in the mind, and that, once associated by any bond whatever, the appearance of one suffices to evoke the other.

In the culture of the memory the teacher will then take advantage of the association of ideas and of its different principles,—some of them accidental and exterior, like contiguity in time and space; others intrinsic and logical, like the relation of cause to effect. The more relations that are established among the items of knowledge, the greater will be the association of ideas, and the more active and tenacious the memory. —*Compayré*.

In the perception of an object, as an apple, there are actually present, it will be remembered, only a few sensations. All the rest of the perception is supplied by the mind. The mind supplies sensations coming from other senses besides those in use; it extends and supplements them; it adds the emphasis of its attention, and the comment of its emotions; it interprets them. Now all this supplied material may fairly be said to be the work of the imagination. The mind idealizes—that is, fills in with its own images—the vacuous and chaotic sensations present.—*Dewey.*

CHAPTER III.

IMAGINATION IN EDUCATION.

“Imagination,” says Dewey, “is that operation of the intellect which embodies an idea in a particular form or image.” In short, it is the representation of an ideal object. It is unlike memory. An object of memory is a fact of experience; an object of imagination is wholly an intellectual creation, dependent on memory alone. Imagination disregards experience, yet is limited by the senses. Memory reproduces past concepts; imagination creates new images. Memory refers to the real; imagination to the real or to the unreal. Memory limits the mind to the actual in the past; imagination is free to roam in the present, past, or future, within the realm of the boundless unreal. Hope, prophecy, and

the future are wrought out through the imagination. The sphere of the memory is finite; that of the imagination, infinite.

In memory, the concepts are exact copies of the original concepts; in imagination, the concepts are new; they are new combinations of the experiences given in memory. Experience is the basis of all soul phenomena. Only that which can be remembered can be idealized, and only that which has existed in experience can be remembered. The boundary of memory is experience; of imagination, memory. Memory and imagination are intimately related, yet perfectly distinct in their activities.

Imagination leans upon memory, memory upon perception, perception upon sensation. Memory evolves what was involved in the experiences of perception. Imagination reconstructs the ideas or images formed through perception and revived by memory. Perception and memory deal with particular objects; imagination deals with ideal objects. Memory is the faculty of the soul which

connects the present with the past; imagination, the faculty which idealizes the concepts reproduced by memory.

Without imagination, life would hardly be worth living; without ideals, it would be limited to cold facts, and would degenerate into a sensuous existence. A child's ideal is his reality. Imagination makes the dressed doll a real baby, the hobby horse a real horse, "Santa Claus" a real person. It invests the fairy tales of the nursery with reality. It gives to the landscape a more picturesque appearance, and makes the mountains more majestic, the ocean more sublime. The plays of childhood, the occupations of manhood, the hopes of old age are made more fascinating through the imagination. Without this beautiful and serviceable faculty of the soul, the whole period of life would be discouragingly monotonous. The young live forward in imagination; the old, backward in memory. The imagination carries us out of the world of reality into the world of ideality—out of the finite into the infinite.

The imagination furnishes us with better associations than we find in actual life. It magnifies the merits of our friends and heroes, and thus diminishes their demerits.* It makes the good better, the great greater, the heroic more heroic, the lover more loving, the mother more patient, the father more tolerant. It helps us to see and to feel the real; it helps the young to live forward in the hope of success, and the old to anticipate their reward. Ideals created by the imagination may fail of becoming realities, but they are inspiring and helpful.†

* There is a moment in his life when a young man can see no blemish in the lady he loves, and no fault in the author he admires. A man in love may think that his Angelina sings divinely sweet, though her voice is like a crow's. He interprets the impressions which he receives according to previously formed impressions—*Goethe*.

As Imagination, the mind demands perfection of *sensuous form*. In simple voluntary reproduction of percepts this appears in the selection spontaneously made as between one and another percept or group of percepts.—*Bryant's Psychology*.

† Under the stimulus of an emotion, such as the love of the marvelous or the beautiful, imagination is wont to rise above the ordinary level of experience, and to picture objects, circumstances, and events surpassing those of every-day life. The ideal creations of the imagination are thus apt to transcend the region of sober fact. The child's fairy-land and the world of romance, which the poet and the novelist create for us, are fairer, more wonderful and exciting than the domain of real experience.—*Sully*.

The imagination is intimately connected with the development of the moral faculties. Early religious ideas are almost wholly the product of the imagination.* A child's first ideas of God are the result of imaginative images. The imagination creates ideal heroes, generals, statesmen, and Christians. It thus becomes an important agent in character-building. Character depends upon ideals, ideals upon the creative power of the imagination. Every man has his own ideals which he creates out of his associations with men and books.

Ideals determine purpose. That which best defines a man is not what he is, but what he is trying to become. The value of a life depends

*The imagination is an idealizing and universalizing power. It attempts to clothe all objects with beautiful forms; to find them significant of ideals. It takes the mind beyond its own experiences of perception and memory into what is general, what has no concern with private enjoyments. Imagination thus tends to take the mind beyond the present and the apparent. Hence its kinship to religious emotions and ideas. Early religious ideas are at once the product of the imagination and the most influential means of forming it. Religious emotions, reverence, and especially awe, the objects of religious worship, especially the great personalities of religion, if rightly presented to a child, call out imagination more than almost anything else.—*McLellan's Psychology*.

more upon its purpose than upon what it does. We are always greater in what we are than in what we do. The ideal is always greater than the reality. This must forever remain the relation between aim and attainment; it is not only the logical, but the moral relation between aims and ends:

In education the imagination plays an important part.* Intellectual growth is stimulated by it, moral purpose developed and strengthened. Discovery, invention, realization depend upon it. Art, science, and literature are under obligations

* Without imagination there is little advance in knowledge, little discovery in the sphere of science; and in the sphere of morality, without some imagination you are quite unable to put yourself in the place of another, which is the basis of sympathy and mental support, and the foundation of the social fabric. The mere sight of a neighbor's joy or sorrow does not awaken sympathy.—*T. G. Rooper.*

Progress in science, art, and morality, man's three most precious possessions, would be impossible without it. The ordinary affairs of life require its constant aid; for no plan could be formed, no invention could be originated, without it. All the leaders of the world's life have been men of Imagination. Its inventors have formed new combinations of forces, its generals and statesmen have foreseen new dispositions of nations and empires, its reformers have created ideals that were better than realities, its writers have conceived of characters superior to living men and women, and its moralists have erected standards of virtue and nobility higher than those existing about them.—*Hill's Psychology.*

to its magic and transforming power. Without imagination, artists and inventors would be failures, and teachers mere dreamers.

The meaning of words and sentences depends upon imagination. Our reading charts and first readers are built upon this psychological fact. Primary arithmetics and elementary geographies are illustrated, in accordance with this principle. On this principle is based the pedagogical idea, "The thing—then the word." The word *boy* has no meaning until it awakens in the mind the concept boy. The word *dog* has no meaning until it awakens in the mind the concept dog. The word *John* has no meaning until it awakens the image of a particular boy. No one can write a word without first imagining it; then the pen makes the image visible. The inventor sees the machine in the ideal before he can make it real.

All realities exist first as idealities. The pupil who says "I can't," and believes what he says, fails; but the pupil who says "I can," and

believes what he says, usually succeeds. In the former case, the ideal is failure; in the latter, the ideal is success. Realities depend upon ideals. All study, whether of books, art, or nature, involves the use of the imagination. It is through the help of the imagination that the mind combines into pictures what words symbolize. Meaning depends upon interpretation. Without the power of the mind to supply words with content, they would have no meaning.*

The growth of the imagination is not governed by fixed laws, nor has it a conscious development. It is subject only to the limitations of memory. The training of the imagination is incidental to the training of the other faculties. School studies like geography, history, and literature take the pupil beyond mere facts, and beyond himself; hence they afford training for the imagination. The study of geography, un-

* Imagination is the spiritual power to which all instruction turns, and upon whose co-operation the success of all instruction depends. The pupil apprehends the words of instruction only when his imagination succeeds in illustrating them by corresponding concept images.—*Linder's Psychology*.

der proper guidance, affords special training of the imagination within healthy limits. The contemplation of rivers, lakes, seas, oceans, landscapes, and mountains requires imaginative activity. Effective description without imagination is impossible.

“History is not a collection of dates and names, but a panorama of persons and events.” Without imagination, actions cannot be understood, nor events fully interpreted. The real meaning of an action and the real interpretation of an event are always greater than any verbal description. Without imagination, the pen pictures of the greatest thinkers would be but uninteresting phrases. The heart of things is always hidden, and can be seen only through the eyes of the imagination.

For the training of the imagination no special directions can be given. There are no “specifics” in educational methods. No one can *consciously* follow the directions of another and succeed. The training of the imagination is an

indirect result of proper methods and healthy mental nourishment.

Literature, prose and poetry, abounds in matter which especially trains the imagination. The writings of Sir Walter Scott are particularly well adapted to train the imagination of the young. Milton's "Paradise Lost" and Tennyson's "In Memoriam" are fine products of the poetic mind for the oldest and greatest imaginations. The poetic imagination is the highest form of creative genius.*

The creative power of the imagination may poison the soul. Ideals formed by association with the low and vicious lead to the formation of sensuous and destructive habits. Children should not be permitted to associate with idlers,

* "And as *Imagination* bodies forth
The form of things unknown, the poet's pen
Turns them to shapes, and gives to airy nothing
A local habitation and a name."—*Shakespeare*.

"It is the divine attribute of the *Imagination* that it is irrepressible, unconfined; that, when the real world is shut out, it can create a world for itself, and with a necromatic power can conjure up glorious shapes and forms and brilliant visions, to make solitude populous and irradiate the gloom of the dungeon."—*Washington Irving*.

rich or poor; nor should they be permitted to read "dime novels," or any other form of cheap and trashy literature. Only the purest, choicest literature should be given to the young. Improbable stories, with improbable moral lessons, destroy the imagination and fill the soul with distrust. Much of the Sunday-School literature of to-day is wholly unfit for the young. It is the product of diseased and bigoted minds. Children look with suspicion upon the miraculous in our age. They are compelled by their own experiences to reason about the experiences of others.

The imagination often affects the bodily functions. Disease has been induced by it, cures have been performed by it. Men have been put to death by merely working upon their imaginations. The idea of a nauseous taste often produces vomiting. Darwin says: "The mere sight of a person about to pass a sharp instrument over a glass is sufficient to excite the well known sensation in the teeth."

The imagination may become destructively cre-

ative. It is "a good servant, but a bad master." It often leads the enthusiast into financial schemes absolutely impracticable. It leads the rejected lover to suicide, and the madman to murder.*

I pity the teacher whose school work is limited to facts. The teacher's ideals have much to do with the pupil's realities. Ideals create standards. The real man depends upon the ideal man, the real school upon the ideal school. Thinking out ideals is building higher realities. When an ideal is once conceived, we consciously and unconsciously, strive to realize it. The ideal leads us to work for specific ends. A man without ideals is but a dreamer; without ideals, life is aimless. The enthusiasm which high ideals create will do more for a school than set lectures, however classical and eloquent. This is, indeed, a cold world for those who live within the limits of demonstrable facts and passive belief. Teachers, essayists, and public speakers, who lack the

*"Lovers and madmen have such seething brains,
Such shaping fantasies, that apprehend
More than cool reason ever comprehends."—*Shakespeare*.

creative power of the imagination are failures. They may think correctly, but they cannot inspire. Inspiration requires imaginative power.

The imagination is an indispensable activity of the soul; it fills an important place in education, moral and intellectual. In all ages, educators have acknowledged the educational value of the imagination. However, it is of less importance than memory, because it is not to the same degree a pedagogic faculty. Unlike memory, the imagination cannot be trained by direct methods, but it can be held in check through the use of proper mental aliment. It would be a false system of education that would seek to cripple or to destroy the imagination—the source which supplies us with so many beautiful and noble things.

When an impression has been well fixed in the mind there remains a predisposition or tendency to reproduce it under the form of an image. The degree of facility with which we recall any object always depends in part on the strength of this predisposition. Nevertheless, this predisposition will not in ordinary cases suffice in itself to effect a restoration after a certain time has elapsed. There is needed further something present to the mind to *suggest* the image, or remind us of the event or object. Thus the sight of a place reminds us of an event which happened there, the hearing of a person's name of that person, and so on. Such a reminder constitutes the "exciting" as distinguished from the "predisposing" cause. The reason why so many incidents of our past life, including our deeply interesting dream-experiences, appear to be wholly forgotten is that there is nothing in our present surroundings that distinctly reminds us of them.—*Sully.*

CHAPTER IV.

ASSOCIATION IN EDUCATION.

“Relationship,” says Dewey, “is the essence of meaning.” Scientific knowledge is more than a statement of isolated facts. It is knowledge of facts plus a knowledge of their relation to other facts. The material world suggests the value of relation in the study of the intellectual world. The universe is not a hap-hazard group of planets, but an orderly, related, dependent system of worlds. The mental life of man has meaning only as it relates itself to the world in personal experience.

Recognition is the reproduction of a concept. The reproduction of a concept, however, is more than a mere awakening of the concept; it carries with it a train of associated concepts. In the recognition of an old acquaintance, we

may call up many of the circumstances connected with the acquaintance, as when, where, and how we first met. This fact alone shows that reproduction depends upon association; hence the value of association in education.* If the mind could not reproduce or recall the past, everything would forever remain new or unknown. If it were not for the laws of association, it would be impossible to relate the present to the past or to the future. The labor of learning even a little would be immeasurable.

The mind cannot conceive of an object, event, or fact, material or immaterial, as unrelated. We do not think of man as an isolated individual, but of man as related to man. We do not think of God as an isolated King, but of God our Father. Meaning depends upon relation. An isolated sensation, perception, or conception is

* "Of a whole group of contemporaneous events, any one may call up the image of the other. In the case of a series of events, each link tends to call up the adjacent link."—*Sully*.

"Lulled in the secret chambers of the brain,
Our thoughts are linked by many a hidden chain;
Awake but one, and lo! what myriads rise,
Each stamps his image as the other flies."

as meaningless in the soul-world as an isolated man or tree in the material world. The soul cannot hold in consciousness isolated percepts and concepts.* So strong is the desire of the soul for association, that even unlike concepts which enter it at the same time soon establish strong friendships.

Perceptions are dependent on present external objects ; hence the order in which they occur depends upon the order in which the senses present the external objects. Representations, however, being wholly mental products, the order of their sequence is determined by the laws of the mind—by the laws of association. Ideas are not connected in a hap-hazard way, but by natural laws.

* Facts, in and of themselves, have relations to one another, or explain, that is, furnish reasons for one another. The mind also has an instinctive tendency to connect facts and search for reasons. Now, if facts be taught according to the relation which unites them, and if interest be awakened in the mind in assimilating the facts, the mind can hardly help, even if it would, a final discovery of the relation. The teacher must have the greatest confidence in the rationality of facts, when they are rightly connected, and in the native tendency of the mind to develop itself through, first, unconscious appropriation of this rationality, and, second, conscious recognition of it. If the teacher will but have confidence in facts and in intelligence, he will not try himself to take the place both of the facts and of the pupil's mind.—*McLellan's Psychology*.

The bond of association which connects the present and the past is determined by the character of the habits of the individual thinker. But in all cases of reproduction the present, suggesting state must be similar to a previous state ; that is, the suggesting and suggested states must be similar, differing only in time. I see a boy, and recognize him as the one I saw yesterday. I hear a sound, and recognize it as similar to one I heard this morning. A present duty recalls a similar duty done yesterday.

In association by similarity, ideas, objects, or events which are alike have the power of recalling one another.* This fact plays an important part in education ; it aids the memory, and thus frees the mind from bondage to sense-perception. A little thinking will show that association is the fundamental law of the mind ; hence its laws

* Association by similarity illustrates the general principle of all intellectual acquisition, that the mind only gains full possession of a new idea, fact, or truth when it assimilates it to kindred elements of cognition already acquired. This attaching or linking on of new ideas to old is described by the Herbartian psychologists as *Apperception*. We apperceive or mentally appropriate a new idea through the medium of some similar idea or group of ideas.—*Sully*.

should be recognized in the arrangement of school studies and constantly applied in instruction. All the phenomena of memory, imagination, and reason depend upon the association of ideas. The facts of mental association should suggest, not only the order of school studies, but also the method of instruction. Pedagogics cannot give specific directions, but only general suggestions. The teacher must *think* himself into a knowledge of the art and science of instruction, and make his own application of principles and laws. Specifics, if they could be discovered, could not be used by those who had not thought themselves up to the plane of those who discovered them. Gifts do not enrich ; education is an unfolding, rather than an accumulating process ; every one acquires not only his intellectual power, but his value to the world.

According to Linder, three simple laws cover the essential points in reproduction and association in education. First, THE LAW OF SIMILARITY ; second, THE LAW OF CONTRAST ;

third, THE LAW OF SIMULTANEITY. According to the law of similarity, "Similar concepts reproduce one another." A portrait recalls the original. The face of a stranger calls up the face of a friend, because of its resemblance. The taste of a sweet apple just eaten recalls the taste of one eaten yesterday. A woman once bitten by a snake may be ever after startled by the sight of a rope, because of its resemblance to a snake. The work done by a phrase suggests the work done by a clause. The pupil who understands square-root is well on his way to a mastery of cube-root.

Contiguity also associates ideas. Smoke suggests fire; the term jockey, a race; the odor of a rose, a rose; Patti, music; Mt. Vernon, Washington; Concord, Emerson; Calvary, Christ. A person's name may be recalled by recalling his appearance or the name of the town in which he lives. The sight of a house or town calls up an event which happened there. Ideas thus related in place or time by one activity of the mind be-

come one concept, and recur with it as fractional parts of it.*

Ideas are also associated by contrast. "Contrasted concepts reciprocally reproduce each other." Sorrow suggests joy; vice, virtue; life, death; mortality, immortality; the cold of this winter, the heat of last summer. The adversative clause in language aids in giving prominence to the leading proposition; thus, Bacon had culture, but needed character. A formal character is something, but a real character is more. The charm of contrast is in the fact that a concept rises into a clearer consciousness by the help of

* Why is it that ideas enter into successive trains, each suggesting the next? The answer in a general way is that ideas which have been once connected together have the power of calling one another up. Association is thus seen to depend upon non-voluntary attention. In the latter, as we have learned, as many parts as possible are made one. Now, if one of these parts is presented, there is a tendency for it to complete itself by suggesting the parts not actually presented. These parts are said to be re-presented. Suppose, to take a very simple example, that I have heard a celebrated orator deliver a speech; by my acts of attention at the time, the speech and the speaker became indissolubly united into one idea. Now, years afterward, I read this oration and there recurs to my mind the idea of the speaker as he delivered it. The reason is evident; the speech is not an independent idea in my mind; it is only one part of a larger idea, and it completes itself by suggesting its other member.—*McLellan's Psychology*.

its seeming opposite. Contrast is a means of education. Children are struck by contrast as forcibly as by likeness.

By the law of simultaneity, "Concepts which are simultaneously in consciousness reproduce each other." This is true, whether concepts are alike or unlike. The fact is due to association. This law associates in consciousness what nature has related by juxtaposition in space or time. Similarity logically—and simultaneity mechanically—connect concepts. In similarity, we associate ideas together because of similar content; in simultaneity, because nature has united them in one concept.

"Association," says Sully, "clearly implies two facts, and a relation of dependence between them." Association by similarity greatly aids in the acquisition of knowledge. The law of similarity groups together similar ideas. Mental acts which occur together seek to recur together. This is true of all forms of human experience. In every day's conversation we have evi-

dence of the value of association. A word or chance phrase calls up circumstances and events which had seemingly passed out of consciousness.

Every day experience proves that ideas suggest ideas, both similar and dissimilar. This fact alone shows that the soul is self-active—that its activity is inherent. It is conclusive proof that the mind is more than a store-house, that an idea is more than a thing.

Knowledge is acquired and extended by connecting present experiences with those of the past. Association relates the present to the past, and aids in apprehending the present. It not only connects the various elements of soul-life, but it is the basis of the mechanical life of the soul. The soul, like the body, is subject to and governed by the laws of habit.

All intellectual guidance of the young manifestly implies the power of holding their attention. Instruction may be said to begin when the mother can secure the attention of the infant to an object by pointing her finger to it. Henceforth she has the child's mental life to a certain extent under her control, and can select the impressions which shall give new knowledge or new enjoyment. What we mark off as formal teaching, whether by the presentation of external objects for inspection through the senses, or by verbal instruction, clearly involves at every stage an appeal to the attention, and depends for its success on securing this. To know how to exercise the attention, how to call forth its full activity, is thus the first condition of success in education.—*Sully*.

CHAPTER V.

ATTENTION IN EDUCATION.

Attention is the application of the mind to any object of sense, representation or thought.

—WEBSTER.

By attention I mean fixity of thought, the concentration of the whole mind upon one subject at a time; that effort of will by which we are enabled to follow what we hear or read, without wandering, without weariness, and without losing any particle of the meaning intended to be conveyed.

—FITCH.

There are two kinds of attention, voluntary and involuntary. Voluntary attention is an act of the mind caused by interest in an object, a representation, or a thought; involuntary attention is an act of the mind caused by the unusual appearance of an object or a representation, or by the force of a statement. Attention may also be divided into subjective and objective attention. Subjective attention is the act of the mind looking inward upon its own crea-

tions ; objective attention is the act of the mind looking outward upon the external world.

Giving attention is the mind's way of bringing into clear consciousness what is presented to it. The habit of attending is a growth—the result of methodical and persistent training. All kinds of habits are growths.* Pupils learn to see by training their eyes to see, to hear by training their ears to hear ; so the mind learns to attend by being trained to concentrate its powers under the direction of the will. A mind trained to habits of attention has many advantages over one not so trained. It can concentrate its powers upon an object or thought more readily and completely and hold them longer upon such object or thought. Thus the trained mind appropriates more of that to which it

*Voluntary attention through long habit may acquire the absorption of absent-mindedness. Archimedes would forget to eat his meals, and only compulsion forced him to the bath ; he lost his life in such a fit of abstraction, at the hands of a Roman soldier to whom he was too absorbed to return the answer that would have saved him. Sir Isaac Newton would sit, half dressed, on his bed for many hours of the day, when composing the Principia.—*Van Norden*.

attends than the untrained mind, and retains it longer. From these essential facts, it is readily seen that attention plays an important part in the development of the mental life of man.

The most significant word in a teacher's vocabulary is attention. The secret of success in teaching is contained in that word. Without that indefinable power which secures and retains the attention of pupils, one cannot teach. "Learning," says Emerson, "depends upon the learner." The pupil who does not attend during recitation is but little more present than the pupil who is wholly absent.* Without attention and interest, instruction avails little

*Without attention nothing can be learned. If we do not get perceptions we have no conceptions, and therefore no memory for we have nothing to remember. The more complete and prolonged our attention the more definite our perceptions, conceptions, and memory. Poor memories result from indistinct perceptions and these come from inattention.—*Hughes*.

What is called "attention" is the principal mental condition which determines the entire character of every field of consciousness. For all our conscious states are characterized by some degree and kind of attention. We must attend in order to know any object whatever in the stream of consciousness. This is as true of our own thoughts, feelings, and plans as it is of trees and horses and flowers.—*Ladd*.

or nothing. Attention is the necessary condition of mental development. The longer the mind is concentrated upon a single object or thought without weariness, the greater is its development. The vividness of our recalled impressions depends upon the quality and amount of attention given to them when first perceived.

Conscious sensation depends upon attention. A person may be so thoroughly absorbed in the solution of a problem or so lost in the contemplation of a scene in nature or art that he may not hear the call to dinner or the report of a pistol in an adjoining room. When the mind is voluntarily engaged, when it is aggressively attentive, it is lost to all else save the object or thought it is urging into a clearer consciousness. It matters little to the pupil whose mind is wholly absorbed in an interesting story, a difficult problem, or in viewing a scene in nature what is going on around him;

he has no consciousness left for any other source of sensation.

Perception depends upon attention. The character of the percept or impression depends upon the attitude of the mind at the time the object or thought is presented to it.* That is, we clearly perceive only when the mind is attentive. Without the pupil's undivided attention his perceptions will be so blurred that they will soon

*The freshness and vividness of sensations are intensified by attention. An absent-minded person, though a lover of music, may lose the pleasing effect of the most beautiful symphony or aria through sudden distraction of attention to some wonted train of thought. Either painful or pleasurable sensations may be dulled or quite ignored by persistent distraction. Consciousness turns the yellow spot of its mental eye upon the sensation and it is seen more clearly.—*Van Norden*.

The objects which present themselves to our senses are only clearly discriminated one from the other, and classed as objects of such and such a class, when we attend to them. So again present impressions only exercise their full force in calling up what is associated with them when we keep them before the mind by an act of attention.

The immediate effect of an act of attention serves to give greater force, vividness, and distinctness to its object. Thus an impression of sound, as the tolling of a bell, becomes more forcible, and has its character made more definite, when we direct our attention to it. A thought, a recollection, is rendered distinct by attending to it. The intensification of consciousness in one particular direction produces thus an increase of illumination, and so subserves the clear perception and understanding of things.—*Sully*.

fade out, hence his memory will have nothing to recall. It is the teacher's duty to see that pupils carry away from the recitation distinct impressions of the leading facts in the lesson. Retention depends upon perception.* The facts which pupils remember and the images which they recall are those facts and images which attracted and held their attention.

Teaching depends upon attention. As learning is the art of giving attention, so teaching is the art of securing and retaining attention. Teaching a pupil is little more than training him in habits of attention. Pedagogics cannot give specifics for securing and retaining the attention of pupils. Success in teaching depends upon knowledge of the laws of the mind, a mastery

*The vigor of perception depends upon a concentration of attention upon the psychic action occasioning it. We may easily see and not perceive, or perceiving, not perceive clearly. That the process may be keen and accurate, the mind must direct and supervise. You smell odors of flowers—you stop, sniff the air, and perceive that it is mignonette. Or you hear a bell, start up, and on second stroke, listening, perceive that it is the fire alarm. A steamer passes on the river; you shade your eyes, look intently, and perceive the name on the pilot house.—*Van Norden*.

of the subjects taught, and tact in giving instruction. A teacher's value as an instructor depends, in a very large measure, upon his ability to secure and retain the attention of his pupils during recitation.*

The key to attention is interest. No teacher can long compel the attention of a class of pupils. He must interest the class in the subject. Willing on the part of the teacher must end in interest on the part of the pupil, hence the subject matter should be clearly within the comprehension of the pupil and related to subjects he has

*A teacher might as well stand up and solemnly set about giving a lesson to the clothes of the class, whilst the owners were playing cricket, as to the so-called class, if the pupils were inattentive. Attention is a thing to be learned and quite as much a matter of training as any other lesson. A teacher will be saved much useless friction if he acknowledges this fact, and instead of expecting attention which he will not get, starts at once with the intention of teaching it.—*Thring*.

For you know, however hard it may be to gain attention, we must get it if we are to do any good at all in school. It is of no use there to tell children things which go no deeper than the surface of their minds, and which will be swept away to make room for the first trifling matter which claims admission there. If children are really to be the better for what we teach, if the truths which we love so well are really to go deep into their consciences, and become the guiding principles of their lives, it is no half-hearted, languid attention which will serve our purpose.—*Fitch*.

studied. Appropriate, suitable matter presented in a pleasant and enthusiastic manner usually interests and pleases others. The pupil who is not attracted to a subject by his interest in it, will remember little or nothing about it. He may go over it in the usual routine way, without obtaining any knowledge of it.* Interest is not only the mother of attention, but it is also the only source of pleasure and profit in the pursuit of knowledge.

Feeling depends upon attention. Without attention, the most impressive scenes in nature, the most touching strains of music, the most

*It should be the skill and art of the teacher to clear the heads of children of all other thoughts while they are learning anything, the better to make room for what he would instill into them, that it may be received with attention and application, without which it leaves no impression.—*Locke*.

The inattention so lamentably noticeable in many schools, is due to the fact that pupils are mere recipients of information and not active participators in the progress of learning. They are hearers when they should be doers. Their desire for mental activity languishes and gradually dies from lack of exercise for their mental powers. They are only required to listen or look and remember. They become passive because the teacher gives them little opportunity to be anything else. They would lose some of their powers altogether if they went to school all the time.—*Hughes*.

eloquent appeals to the moral sentiment, produce no effect, create no feeling. A person may be so deeply interested in the investigation of a subject or so intensely excited in a physical contest that he would not feel a severe bodily injury, until the interest or excitement had subsided. Thousands of soldiers have remained unconscious of their battle wounds until the battle was over. Limbs have been amputated without pain to the patient who had, by an effort of abstraction, centered his mind upon some other object of thought.*

Willing depends upon attention. Conscious-

*Before the introduction of chloroform, patients sometimes went through severe operations without giving any sign of pain, and afterwards declared they felt none; having concentrated their thoughts, by a powerful effort of abstraction, on some subject which held them engaged throughout.—*Dr. Carpenter.*

A feeling of pleasure or pain is manifestly intensified when we attend to it, or its cause or conditions. A serious bodily injury may hardly trouble our mind, if through some exceptional excitement we are incapable of attending to it. Thus a soldier wounded in battle has sometimes hardly felt any pain at the moment. On the other hand a very moderate sensation of discomfort, as an irritation of the skin, grows into something intensely disagreeable if the attention is fastened on the particular bodily locality affected. Finally our actions are vigorous and precise in proportion to the amount of attention we give to them.—*Sully.*

ness is always more interested in one of its objects than in another. A pupil can will to study or to play, which depends upon selective attention. If the pupil thinks only of the sport of the play, he will choose the play; if he thinks more about the consequences of neglecting his lessons than about the fun in the play, he will remain in school. It should be clear to any thinking teacher that attention is the conditioning factor in the development of intellectual life. Knowing, feeling, and willing are phases of mental life involving attention. It should also be clear that voluntary attention depends upon interest. Uninteresting and monotonous recitations cannot long hold the attention of the young or the old. Interest in school work depends much upon the adaption of the school task to the pupil's ability.

Seeing depends upon attention. "We see only what we are trained to see." On a journey the botanist sees little more than plants and

flowers, the geologist little more than pebbles and rocks, the artist little more than landscapes. Pleasure-seekers and tourists see only those objects or scenes which interest them. Teachers should train themselves to see their pupils.* A glance of the eye should cause every inattentive pupil to return to his work. Teachers should see much, talk little.

*What every good teacher greatly needs is a quick eye and a comprehensive glance, which will take in the whole class at one view, or travel instantly from one part of it to the other. He should be able to detect the first rising of disorder, and the first symptoms of weariness, in an instant, and to apply a remedy to it the next instant. It is from want of promptitude in noticing the little beginnings of inattention that our classes so often get disorderly and tired. I recommend every one who wants to be a good teacher, therefore, to cultivate in himself the habit of sharpness and watchfulness. He should so train himself that he shall become peculiarly sensitive about little signs of inattention. It ought to make him uncomfortable to see one child's eye averted, or one proof, however small, that the thoughts of the class are straying from the subject. The surest way to increase inattention is to seem unconscious of it, or allow it to pass unnoticed.—*Fitch*.

In a world of objects individualized by our mind's selective industry what is called our "experience" is almost entirely determined by our habits of attention. A thing may be present to a man a hundred times, but if he persistently fails to notice it, it cannot be said to enter into his experience. We are all seeing flies, moths, and beetles by the thousand, but to whom, save the entomologist, do they say anything distinct? On the other hand, a thing met only once in a lifetime may leave an indelible experience in the memory. Let four men make a tour in Europe. One will bring home only picturesque impressions—costumes and colors,

Teachers who cannot see more than one pupil at a time should not hope to govern a school properly, nor to secure the attention of a class. Many teachers cannot or do not see all of one pupil at a time. "They have eyes, but they see not." Most teachers could, if they would, train themselves to see their pupils, yet seemingly not see them. Pupils should be seen all the time, yet not watched. Seeing pupils is an art.

Attention secures order. A school without order is a school without an aim. Quiet not only induces thought, but it is the condition essential to thinking. No one can either secure or retain the attention of a class while there is a constant or even an occasional movement in

parks and views and works of architecture, pictures and statues. To another all this will be non-existent; and distances and prices, populations, and drainage arrangements, door and window fastenings, and other useful statistics will take their place. A third will give a rich account of the theatres, restaurants, and public halls, and naught beside; whilst the fourth will perhaps have been so wrapped in his own subjective broodings as to be able to tell little more than a few names of places through which he passed. Each has selected, out of the same mass of presented objects, those which suited his private interest and has made his experience thereby.—*James.*

the room. One pupil walking across the floor during a recitation distracts the attention not only of the reciting pupil and of the class, but also of the teacher and the pupils of the other classes.* Restless physical conditions indicate a wandering state of the mind. When the mind is earnestly engaged the body is at rest. Attentive minds in quiet bodies—then the recitation. A pupil may be quiet in body and seemingly attentive yet intellectually absent. An attentive presence is the prime condition of learning. To inattentive pupils the recitation is a mere formality. But order is only one step toward the mental condition which trains the

*Appeals to attention that come through the eye are much harder to resist than those that come through the ear. Sights distract more than sounds. Movements of pupils, therefore, are among the most certain causes that lead to inattention to the subject of study. We may become so accustomed to sounds, and even to fixed and unchanging sights, as to be quite unconscious of them while we are studying. We can never reach a condition of concentration so deep as to prevent the distraction of our attention by movements within the range of our vision. Pupils cannot study well near an open window overlooking the street, or a place where workmen are employed. Shading the eye so as to shut out the attractions that appeal to it often aids the student in concentrating his attention.—*Hughes*.

mind to habits of attention. Mental activity must accompany order. The mind must be aggressively active. If pupils are uniformly inattentive—if they have acquired the habit of a restless wandering of body and mind during recitation, the teacher should look to himself for the reason; he is responsible.

It is intensity of attention that yields permanency of impressions.* Passive, comatose conditions of the mind do not lead to interest or knowledge. Little or spasmodic attention means little or no advance. Only intense and prolonged attention can bring an object, representation, or thought into clear consciousness, and only those objects, representations, or

*The degree of attention we give, whether forced or voluntary, has much to do with our noticing distinctions; and, indeed, with the very existence of our sensations and ideas in their varied forms. It also determines largely how we shall interpret our sensations. Repeated acts of attention "clear up" any object. Thus if a disk, having on it differently colored spots or lines or different letters, be displayed a brief time, the utmost attention will on the first trial enable us to discern perhaps only some three or four of these objects. But soon by repeated acts of attention a larger number of the objects is clearly seen after the disk has been displayed for the same length of time.—*Ladd*.

thoughts which have been duly held in clear consciousness can be recalled. Teachers, accept this fundamental fact as a universal fact and set about studying how to get the undivided attention of your classes during recitation. Without the presence, tact, and enthusiasm which compel attention you cannot succeed in the schoolroom.

Earnestness is essential. Without aggressive earnestness a teacher cannot secure the attention of his class. A teacher who would have the undivided attention of his class, must throw all of himself earnestly into his work. No one can interest or instruct a class while asleep. Breathing men inspire others. There is a magnetic personality in all successful leaders. Purpose is seen in eye, gesture, and speech.* The

*The teacher's manner will influence his pupils for good more than his precepts or advice. They may laugh at his logic, they cannot resist his personal power. If a man is not in earnest his pupils will not be zealous. He justifies inattention, if he does not speak and act in such a way as to show that he regards his teaching to be of great importance.
—Hughes.

power which commands the respect and obedience of pupils is inherent.

An indifferent or an incompetent teacher cannot secure the respect and confidence of his pupils, hence he cannot secure their attention. Teaching demands the whole of sincere and courageous men and women. The young and timid cannot build ideals for children. The weak cannot lead the weak. The doubting, halting, monotonous teacher cannot secure the attention of his pupils. Example is the great teacher. If the teacher dreams, the pupils will dream also. Want of energy in speech and action is a frequent cause of failure in teaching. A dreaming, lingering form of expression, accompanied by a slow and uncertain bodily movement on the part of the teacher, produces similar unhealthy conditions on the part of the pupils. Inspiration is born of confidence and energy. Courageous action on the part of teachers begets courageous action on

the part of pupils. The law of cause and effect is a uniform law.*

In the primary grades the teacher's success depends almost wholly upon her power to secure and tact to retain the attention of her pupils. Without the methodical tact which compels the pupils to give attention, the primary teacher is the greatest of all school room failures. Primary teachers need not only tact to execute, but ability to invent. Young pupils love new ways

*Whether it be school lesson or subject of common talk out of school, the enthusiast drags the boy's mind captive. He makes him attend, he makes him interested, he makes him think. Without trying to do so, he makes learning seem attractive and delightful. Boys are naturally impressionable, and enthusiasm impresses; they are naturally imitative, and whatever they see a man keen about, they at once begin to excite themselves about it. Whether it be poetry, history, politics, art, science, natural history, or archæology, the enthusiast will at once make a school of his own imitators about him. And he will do far more than this. He will lift boy after boy out of the barbarous intellectual atmosphere in which the natural boy lives and moves, and make him conscious—though it be only dimly conscious—of the vast world of interest which lies around in every direction, waiting till he gird up his mental loins and come to explore. This is the real result of a master's enthusiasm—it cultivates. Under plodding, hum-drum teachers who will not put soul into their work, a boy may pass through a school from bottom to top, doing all the work so as to pass muster, and be a savage at the end. But let the enthusiast catch him, though but for a term, and the savage is converted.—*Sidgwick.*

of doing things, hence the primary teacher should know more than one way of doing the same thing. The teacher who knows but one way of presenting a subject or hearing a recitation is little more than a machine. The one-method teacher and the routine formalist soon put the brightest pupils to sleep. Mere formalism stupefies.

Knowledge is essential. "By how much we know, so much we are."* Without the ability to clearly present a subject to pupils the teacher can neither get nor hold their attention. Only masters inspire and lead others. No teacher

*A simple, unchanging, almost mechanical routine of tuition may be carried out by the commonest intellects, with such small beneficial effect as it is capable of producing; but a complete system—a system as heterogeneous in its appliances as the mind in its faculties—a system proposing a special means for each special end, demands for its right employment powers such as few teachers possess. The mistress of a dame-school can hear spelling-lessons; any hedge-schoolmaster can drill boys in the multiplication-table; but to teach spelling rightly by using the powers of the letters instead of their names, or to instruct in numerical combinations by experimental synthesis, a modicum of understanding is needful; and to pursue a like rational course throughout the entire ranges of studies asks an amount of judgment, of invention, of intellectual sympathy, of analytical faculty, which we shall never see applied to it while the tutorial office is held in such small esteem. The true education is practicable only to the true philosopher. Judge, then, what prospect a philosophical method now has of being acted out! Knowing so little as we yet do of Psychology, and ignorant as our teachers are of that little, what chance has a system which requires Psychology for its basis?—*Spencer*.

can teach all he knows, hence he should know much that he may teach a little fairly well. Every teacher is conscious that he knows his subject, or that he does not know it. If he knows it, he approaches it with confidence and vigor; but if he does not know it, he approaches it with fear and trembling. Incompetency is always timid and passive; competency usually fearless and aggressive. The first condition of success in the schoolroom is competency. The teacher should be accurately and abundantly qualified to teach every subject assigned him. There should be a positive ring in every statement he makes.

Pupils must believe that the teacher is qualified to instruct them. They must believe that he is not only competent but honest. Character is the primary virtue. Teachers need the courage born of purpose. There is no sadder spectacle on earth than a school teacher who has no convictions or who is afraid to think

aloud. Dummies and cowards have their uses, no doubt, but they should never be placed in charge of children. Accurate scholarship, earnest effort, and manly independence leave lasting impressions upon pupils, but ignorance, indifference, and dependence are obstacles in the way of intellectual and moral growth. The teacher should know the subject rather than its treatment by a special author.* Slavery to text-books suggests incompetency and creates distrust in the minds of pupils. Teachers are more inspiring without a text-book in hand than with one. One ounce of a living teacher is worth a pound of a dead author. Pupils need the inspiration born of personality.

Method is important. A feeling recognition by the teacher that his methods are founded upon correct principles does much to sweeten his

*I always notice when a man is teaching that the moment he gets within sight of the horizon, and feels that he is approaching the limits of his own knowledge, he falters; he becomes embarrassed; he loses confidence in himself; the children soon detect his weakness, and the lesson loses interest immediately.—*Fitch*.

labor, and to strengthen his faith in himself. It also gives him more faith in his pupils. The one virtue in teaching is concentration. Many teachers present so many facts at a recitation that little or no impression is made upon the mind of the learner. Teachers should concentrate the minds of their pupils upon one thing at a time that they may acquire distinct impressions.* The more concentrated and intense the act of attention, the deeper and more lasting the impression. The narrower the circle of attention the clearer the consciousness of an object or impression.

*The searchlight of consciousness cannot play upon many groups of phenomena at once. If any but confused thinking is to be done, attention must be directed to one grouping, and abstraction for the time from all others enforced. The success of Hegel is in part explained by the fact that he took a manuscript to his publishers in Jena on the very day when the battle of that name was fought, and to his amazement—for he had heard or seen nothing—he found French veterans—the victorious soldiers of Napoleon, in the streets.—*Van Norden*.

A general idea or concept is the idea in our minds answering to a general name, as soldier, man, animal. When we use these terms we do not form complete pictures of individuals with their several peculiarities. Thus the term soldier does not call up the full impression of some one individual that we happen to know, with his proper height, style of uniform, etc. Still less when we use the name animal are we distinctly imagining some particular individual, as our dog Carlo or the elephant Jumbo. The general idea or notion is thus not a pictorial representation of a concrete thing, but a general abstract representation of those qualities which are common to a number of things.—*Sully.*

CHAPTER VI.

CONCEPTION.

The composite notion formed in the mind by the fusion of the several characteristics common to a class of objects is called a concept. A concept, therefore, is not an image, but an intellectual product. It is a general notion—the primary act of thinking. The mind can image an individual dog, but not a universal dog. The term dog does not bring to the mind the image of any particular dog, but a composite notion formed by the fusion of the images of several particular dogs. A concept is the representation in the mind of an object belonging to a class. The concepts boy, girl, cat, hat, do not bring to the mind the images of any particular boy, girl, cat, hat, but of these objects in general. Perception has

reference to some particular object, but conception has reference to a class of objects.*

HOW CONCEPTS ARE FORMED.—How is the concept cat formed? How does it acquire its representative power? It does not bring to the mind the image of any particular cat, but is clearly ideal in its meaning. It stands for the universal element—for the ideal cat, formed in the mind by grouping the characteristics common to cats. It is formed by abstracting the characteristics common to many cats, comparing, and generalizing or classifying them. By sense-perception a child forms as many percepts, or mental images, of cats as he sees individual cats. Almost unconsciously, he notices certain marks common to all of them; that is, by observation he abstracts or sets aside these common marks, and quite as unconsciously he compares them and classifies them. In this way he forms

* It is to be noted that while a *Percept* has for its subjective aspect a *sensuous* element, the objective form of which is an "*Image*;" a *Concept* has for its subjective aspect a *thought*-element, the only adequate objective form of which is a *word*.—Bryant's *Psychology*.

the concept cat. Likewise the concept horse is formed. It stands for the animal horse in general—for all breeds of horses—for horses of all sizes and colors. It is formed by the assimilation of the marks common to all horses; hence it stands for the universal or ideal horse. In the concept horse, the individual horse is included, but his identity is lost. He is seen only as a part is seen in the whole. In forming the concept horse, the child is compelled to abstract or set aside the marks common to all the horses he has seen, to compare the likenesses, and to class them. These several processes, consciously or unconsciously, accompany each other in forming every concept. It is self-evident that the clearness and permanency of a concept depend upon how it is formed—upon the completeness of the several mental acts which create it. The permanency of knowledge depends upon how it is acquired. The value of instruction depends upon its quality. Instruction cannot create; it can only direct, simplify, and hasten.

The formation of a concept is best understood by dividing the process of conception into three stages, namely, *abstraction*, *comparison*, and *generalization*. These three stages of mental activity are so intimately related and interdependent that for all practical ends they may be regarded as different modes of the same operation. When we perceive a hat, we place it under the concept hat; thus we abstract it from all other objects, and classify it. In perceiving a book on a table, I unconsciously place it under the concept book. In doing so, I abstract it from all surrounding objects, compare it with my ideal book, and assign it to a class. Perception idealizes or interprets the sensation. In this way concrete concepts of familiar objects are formed by a passive assimilation of the different mental acts—by an instantaneous action of the different operations of the mind.

The concept, or general notion, is the characteristic of mind that distinguishes man from the irrational animals. An animal has individual no-

tions, but not general notions. Concepts are concrete or abstract. The concepts man, woman, are *concrete*; manhood, womanhood, *abstract*.*

Perception *apprehends*; conception *comprehends*. Perception has a physical basis; conception is wholly an intellectual process. A percept is a form of sense-knowledge; a concept is the product of an act of the mind. A percept refers to a particular thing in time or place; a concept stands for a class of objects or general truths, without reference to a particular time or place.

Without concepts, scientific knowledge would be impossible; without classes, thinking would be impossible; for the individual has meaning only in his relation to the universal. All school

* In the very process of conception there is involved the recognition of identity in characteristics as between one and another of a series of objects. For this reason the same name can be rightly applied to different objects. Naming is, in truth, a process of identifying—of seeing the one in the many. It is to see in that object all those fundamental characteristics constituting each of the other objects of the series. It is to see that in such series the particular objects are really different from one another only in an external or formal sense; that essentially, in their fundamental nature, they are identical.—*Bryant's Psychology*.

study is a study of concepts.* The study of language is a study of the meaning and relation of concepts. The effort to grasp the meaning of a word exercises all of the conceptual powers. Before a pupil's imagination can fill in a word with meaning, he must abstract it and classify it. This fact suggests that the concrete and pictorial should precede the abstract and technical in school studies—that a reflective use of words should accompany the study of abstract subjects.

Instruction in the lower grades should be given

* Conception, as the apperception of the universal, the grasping of it in a single act or thought, therefore, is not a new kind of knowledge, distinct from perception. It is the more complete development of the element which gives meaning to the percept, and which renders the act of perception possible. When we perceive a book, in the very act of perception we classify it; we bring it under the concept "book." Perception is, as we have repeatedly seen, the idealizing of sensations. The mere existence of sensations does not constitute knowledge of a particular object. Sensations must be interpreted; they must be brought into relation with each other, and with the past experience of the self. Perception is not passive reception; it is the active outgoing construction of mind. In perception, however, these elements of idealization, of relation, of mind activity, are not consciously present; they are absorbed, swallowed up in the product. In conception they are definitely brought out. The self here makes its own idealizing, relating activity its object of knowledge; it grasps this activity, and the product is the concept. Conception is, in short, but the development of the idealizing activity involved in all knowledge to the point where it gains distinct conscious recognition, freed from its sensuous, particular detail.—*Dewey.*

as far as possible by means of object lessons. Concrete facts should lead the way to abstract ideas. Illustration is attended with greater interest than mere verbal description. Words have a real meaning only when their signification is illustrated in the mind by mental images. Objective methods of study are as applicable in the physical sciences as in the more elementary studies. At all ages, illustrative instruction is better calculated to excite interest and hold attention than mere memory recitation. We may get learning from books and teachers, but learning is not knowledge. Knowledge is correspondence with reality.

It is common to distinguish three stages of thinking. First of all, there is the formation of general ideas, general notions, or concepts, which may be said to constitute the elements of thought, such as "material body," "weight." This is called conception. Next to this comes the combining of two concepts in the form of a statement or proposition, as when we say "material bodies have weight." This is termed an act of judging. Lastly, we have the operation by which the mind passes from certain judgments (or statements) to certain other judgments, as when from the assertions "material substances have weight," "gases are material substances," we proceed to the further assertion "gases have weight." This process is described as reasoning, or drawing an inference or conclusion.—*Sully*.

CHAPTER VII.

JUDGMENT—REASON.

The next stage in the process of thinking is judgment. Judgment is the process of asserting agreement or disagreement between two ideas. Every judgment asserts something of something; hence it involves two concepts. Every judgment is expressed in the form of a proposition, the sentence being the symbol. A word alone expresses sense-perception, but a sentence is required to express a judgment. Every judgment contains three distinct elements: (1) that of which something is affirmed, or the subject-term; (2) that which is affirmed, or the predicate-term; (3) the copula-term, or that which makes the affirmation. Thus, in the sentence "sugar is sweet," "sugar" is the subject-

term, "sweet" the predicate-term, and "is" the affirming term. It is thus seen that a judgment takes a concept and says something about it.* In the judgment "sugar is sweet," the principal concept is the subject-term and the related concept is the predicate-term. Whatever is known, is known under the relation of subject and predicate.

REASONING.—Reasoning is the soul's mode of comparing judgments. When a process of reasoning is reduced to a systematic form, it makes a syllogism. "A syllogism is a combination of three properly related judgments." The first judgment is the MAJOR PREMISE, the second the

*Judgment, in its psychological acceptance, is the essential act of thought, the life, so to speak, of the mind. It is in the judgment that ideas are united and made alive; it is in the proposition, the verbal expression of the judgment, that words, the signs of ideas, are brought together and take bodily form.

To judge and to reason are distinct operations of the mind, irreducible to any other. In the activity of the intelligence there are three degrees, three essential moments: conceiving or having ideas, judging or associating conceptions, reasoning or combining judgments. Just as judgment is the coupling of two ideas united by an act of affirmation expressed by the verb *to be*, so reasoning is a sequence or a series of judgments united one with another in such a way that the last seems to be the legitimate conclusion and necessary consequence of those that precede.—*Compayré*.

MINOR PREMISE, the third the CONCLUSION. Illustration: (1) All men are mortal; (2) John Jones is a man; (3) Therefore, John Jones is mortal. The syllogism is deductive reasoning; it proceeds from the universal to the particular; hence the validity of the conclusion depends upon the soundness of the major premise. Every conclusive judgment is a sound judgment. Fallacies result from false premises, as in the following example: All teachers are good men; Adam Smith is a teacher; therefore, Adam Smith is a good man. This is not a valid syllogism for the obvious reason that all teachers are not good men. If all teachers are good men, Adam Smith is a good man because he is a teacher. Whatever is true of all of a class is true of any of the class. Common sense is the best syllogism; it is the rectifier of all forms of reasoning.

Reasoning connects the universal with the particular by finding universal facts in particular facts or by finding particular facts in universal

facts. The first process is *inductive reasoning*; the second, *deductive reasoning*. Induction examines particular facts, and discovers a law; deduction connects the universal law with a particular case. Thus, by weighing several pieces of cork and lead of equal dimensions, I find that each piece of lead is heavier than the piece of cork of the same size; hence I conclude that lead is heavier than cork. That is, I find a general fact from several individual facts. Again, we multiply the fraction $\frac{2}{3}$ by $\frac{3}{4}$ by multiplying the numerators together for a new numerator and the denominators together for a new denominator. From this fact and other similar facts found by analysis, we have the rule for multiplying one fraction by another. That is, in particulars we find the universal. The universal in this instance takes the form of a rule in arithmetic. We pass from parts to wholes, from particulars to universals, whether of concrete objects or of intellectual or moral truths.

By noticing the good effects of several individ-

ual acts of charity, we infer that all acts of charity are helpful, and we express the judgment in the form of an abstract moral truth, "Charity is a virtue." By experiment, Franklin discovered the laws of electricity. By inference, Galileo ascertained the shape and motions of the earth; Leverrier discovered an invisible planet; Columbus an unknown world. It is thus seen that inductive reasoning is an upward movement of thought from particular facts to a general truth. We form most of our opinions by induction. Modern methods of instruction are inductive. It is the only process of reasoning with the very young or with the very ignorant.

Deduction is the inverse of induction; it finds the particular in the universal. It is a downward movement from a general statement to a particular statement; as, all wood will burn; oak is a wood; therefore, oak will burn. All substances which are heavier than water will sink; lead is heavier than water; therefore, lead will sink. A circle is a plane figure bounded

by a curve, all points of which are equally distant from a point within called the centre ; the figure on the blackboard is a plane figure bounded by a curved line, all points of which are equally distant from the centre ; therefore, the figure is a circle. These are clear illustrations of deductive reasoning. Syllogistic or deductive reasoning is little used in school work, except in the higher mathematics. Physics may be regarded as a typical inductive study, geometry, a typical deductive study.

The following is a brief summary of the successive steps in the process of acquiring knowledge. Through consciousness the soul recognizes the *self* as separate and distinct from the *not-self*; through the senses, it recognizes all else as external, and not the *self*; through perception, it forms mental images of individual objects present in the external world; through conception, it forms classes of objects or abstract general truths; through judgment, it determines the truth or falsity of propositions;

through reasoning, it sifts the wheat from the chaff and arranges the product of reason in its logical order. The relation which these steps bear to each other should be thoroughly understood by teachers. The growth of knowledge is a series of logically related mental acts of increasing complexity and completeness.

A child begins to think when it can distinguish its mother from others—when it can distinguish between two colors, two sounds, two odors, two flavors. The process of acquiring knowledge is a gradual one; it starts with sensation, and ends with reason. It is a process of gradually increasing complexity—perception being more complex than sensation, conception than perception, reason than judgment. In perception, the mind is limited to a particular object or event in present time; in memory, to a particular object or event in past time; in imagination, to a particular form of an image; but in thinking, the mind is free to form its own image within the limits of given statements and experiences.

As thinking is "going over and arranging cognitions," it follows that the concept is the basis of the higher intellectual processes. A concept is that about which we think; it is the logical subject of thought. Thinking aims to discover the meaning of universal facts. Thinking is concerned with ideals—with general notions or concepts. It is the power of the soul to form and to apply general ideas; the power to find relation and meaning. We do not think of a particular man, horse, or soldier, but man, horse, soldier in general; that is, we consider the class qualities. The more thoroughly we understand a class of objects, the more thoroughly we understand the individual objects comprised in the class. We think because of the universal element in all things—because of the relation which exists between all things. Meaning is determined by relation. Every thought leans upon other thoughts, and depends upon them for interpretation.

PART SECOND.

PRACTICAL PEDAGOGICS.

Habit is the general form which culture or the outcome of education takes. For, since it reduces a condition or an activity within ourselves to an instinctive use and wont (to a second nature), it is necessary for any thorough education. But as, according to its content, it may be either proper or improper, advantageous or disadvantageous, good or bad, and according to its form may be the assimilation of the external by the internal, or the impress of the internal upon the external, education must procure for the pupil the power of being able to free himself from one habit and to adopt another. Through his freedom he must be able not only to renounce any habit formed, but to form a new one; and he must so govern his system of habits that it shall exhibit a constant progress of development into greater freedom. We must discipline ourselves constantly to form and to break habits, as a means toward the ever-developing realization of the good in us.—*Rosenkranz.*

CHAPTER VIII.

HABIT IN EDUCATION.

The end of education can be reached only by the formation of right habits. The formation of proper habits during the early years of life is very important.* It is not an easy task to substitute a proper for an improper habit. It is hard to dislodge that which has become almost part of self, "For use can almost change the stamp of nature." All conditions, physical, intellectual, and moral, are growths. Character is a growth, not

*The growth of habit is much easier in the early, "plastic" period of life than later on. A more extended process of acquisition, a larger number of repetitions, are needed to fix action in a definite direction in later years. Not only so, since the habitual modes of movement acquired in early life, like the first impressions about things, are most lasting and difficult to get rid of, the formation of good habits later on is obstructed by the tenacity of the opposed early habits. A child that has early acquired an awkward way of sitting, or unpleasant tricks of manner, gives special difficulty to the educator. Movement tends to set in the old direction, and many a painful effort is needed to check the current.—*Sully*.

a mere inspiration or resolution. Civilization and Christianity are growths. Nothing in the natural or in the spiritual world suggests spasmodic or irreverent results. The condition of a life is developed from within, not from without ; it depends upon the *constant*, upon purpose. Habit is the effect of repetition. By repetition we acquire tendency and facility.* The tendency to do an act depends upon the desire acquired by

* A repeated act is easier to perform than an unaccustomed act. This is the law of habit. A lesson gone over with care many times, can be repeated without the book, because the soul has acquired the habit of creating certain states of consciousness in a given order, and hence the repetition of the lesson becomes progressively easy.—*Hill's Psychology*.

The fundamental fact emphasized by the word habit is that all actions become more perfect by repetition. Just as bodily movements, at first tentative, unsteady, and involving effort, come by repetition to be certain, steady, and easy, so the higher exercises of the will in the arrest of impulse and deliberation tend to grow more perfect by steady pursuance.—*Sully*.

The habitual act thus occurs automatically and mechanically. When we say that it occurs automatically, we mean that it takes place, as it were, of itself, spontaneously, without the intervention of will. By saying that it is mechanical we mean that there exists no consciousness of the process involved, nor of the relation of the means, the various muscular adjustments, to the end, locomotion. The various steps of the process follow each other as unconsciously as the motions of a loom in weaving. The tendency of habit is thus to the formation of a mechanism which the mind may employ and direct, but which, once started, goes of itself. This constitutes the special function of habit, or of association.—*Dewey*.

repeating it; the facility with which an act is performed depends upon the frequency of its repetition. As habit becomes permanent, and thus excludes other habits, it tends to determine character. In fact, habit moulds character.*

In the space allotted to this subject, I can briefly notice only those habits which are essential to the growth of moral purpose. These are : HABITS OF ORDER, HABITS OF INDUSTRY, HABITS OF ATTENTION, HABITS OF PROMPTNESS, HABITS OF OBEDIENCE, MORAL HABITS.

HABITS OF ORDER.—Webster says habit is “The usual condition or state of a person or thing, either natural or acquired.” If we would

*The importance of correct habits to any individual can not be over-rated. The influence of the teacher is so great upon the children under his care, either for good or evil, that it is of the utmost importance to them, as well as to himself, that his habits should be unexceptionable. It is the teacher's sphere to improve the community in which he moves, not only in learning, but in morals and manners; in every thing that is “lovely and of good report.” This he may do partly by precept,—but very much by example. He teaches wherever he is. His manners, his appearance, his character, are all the subject of observation, and to a great extent, of imitation, by the young in his district. He is observed not only in the school, but in the family, in the social gathering, and in the religious meeting. How desirable, then, that he should be a model in all things!—Page.

have well-bred young men and young women, we must habituate our boys and girls to habits of cleanliness, quiet, order, and deference.* Most human actions are acquired by practice. A correct use of our mother-tongue can be acquired only through practice in using correct English. "Practiced in youth, accomplished in age," "Practice makes perfect," and "By habit many things become second nature," are all old sayings which proclaim not only the value of repeated effort, but also the strength of habit. Habits of

* Education seeks to transform every particular condition so that it shall no longer seem strange to the mind or in any wise foreign to its own nature. This identity of the feeling of self with the special character of anything done or endured by it, we call habit. Character is a bundle of habits. It conditions formally all progress; for that which is not yet become habit, but which we perform with design and an exercise of our will, is not yet a part of ourselves.—*Rosenkranz*.

Habits originate either from external circumstances or from an act of Will. Many habits are induced by conditions in our surroundings to which we give little attention. We adapt ourselves to our environment, and habits are spontaneously formed. Other habits originate from a specific act, or series of acts, of Will. This is the origin of most of our complex habits; such as reading, writing, playing on musical instruments, etc., which require repeated and attentive mental direction in order to establish them. In general, habit is organized by repeating an action. It is disorganized by discontinuing the action. A habit which is common to many persons, or widely prevalent among them, is called a custom. Customs are the habits of communities.—*Hill's Psychology*.

order can be established only by constant vigilance. The only explanation of order is design—purpose. Order is natural; disorder, unnatural. “Order is Heaven’s first law.”

Without order in the arrangement of its work, the school is little more than a school in name. In no other department of business is order more necessary than in the school. The familiarizing of children with habits of order will have a lasting effect not only upon their school lives, but upon their after lives.* The teacher who leads children to establish habits which will serve them in after life has accomplished a great work; he has led them to do for themselves what no amount of text-book facts could ever do for them.

*There is great need that education should form good habits,—habits of mind, habits of feeling, habits of action. How shall it form them? How shall it succeed in creating that second nature which will constitute the final character of the man?

In truth, the habits are formed of themselves by the repetition of the same act. Some are derived from the inclinations and instincts; others from reflective acts in which the will has co-operated. The part of the educator is, then, to keep watch, both over the instincts and the first manifestations of the will. On the start he will cut short evil tendencies, and nip in the bud vicious inclinations. Evil must be cut away to the very root.—*Compayré*.

A correct habit not only argues its own merits, but suggests other proper habits. Like seeks like.

HABITS OF INDUSTRY.—“There is no excellence without great labor.” Only through experience are we enabled to comprehend the full meaning of many familiar sayings which, with the young, have little or no meaning. Mind is developed only by its own efforts. Use means growth; disuse, decay. The law of development is a uniform law; it applies to all forms of growth. Muscle is developed by using it in those occupations or exercises which require the use of muscle; intellect by thinking; moral character by doing moral deeds, not by merely believing.

School children should be made to feel that the school house is a work-shop, not a play-house; that results can be obtained only through effort. They should be made to feel that the school is an opportunity; that the teacher can only direct; that the value of the school depends almost

wholly upon the pupil's inclination and ability to use his opportunity. "Learning," says Emerson, "depends upon the learner." Pupils should be trained to habits of industry.

HABITS OF ATTENTION.—It is self-evident that attention must accompany every successful effort.* With young children, the attention is gained chiefly by the tact of the teacher, and tact is more a gift than an acquisition. The attention of older pupils can be in some measure

* Voluntary attention, like voluntary action as a whole, is perfected in the form of habits. By a habit we mean a fixed disposition to do a thing, and a facility in doing it, the result of numerous repetitions of the action. The growth of the power of attention may be viewed as a progressive formation of habits. At first voluntary concentration of mind requires a spur and an effort. As soon as the pressure of strong motive is withdrawn, the young mind returns to its natural state of listlessness or wandering attention. A habit of attention first appears as a recurring readiness to attend under definite circumstances, for example when the child goes into his class-room, or is addressed by somebody.—*Sully*.

It is not only in study, in intellectual labor, that attention is profitable. The conduct of life and the virtues of character have no less need of it than excellences of the intelligence have. Defective attention in practical life is the synonym of thoughtlessness and heedlessness. To be habitually attentive is not only the best means of learning and progressing in the sciences, and the most effective prayer which we can address to the truth in order that it may bestow itself upon us, but it is also one of the most precious means of moral perfection, the surest means of shunning mistakes and faults, and one of the most necessary elements of virtue.—*Compayré*.

controlled by the *will* of the teacher ; but success depends upon adaptability, purpose, and energy. It is a personal result.

Attention is merely a concentration of the mind upon a particular object or thought. The soul has the ability to concentrate its whole power upon a single thing. This fact is an every-day experience with all of us. Pupils should be trained to habits of attention. The means whereby the attention can be gained are not general, but special. No recipe can be given which would be even generally applicable. Interest on the part of the teacher usually creates interest on the part of the pupil. Purpose on the part of the teacher generates purpose on the part of the pupil.

The attention of young children naturally goes out to the world of physical objects ; hence teachers should seek to gain their attention by means of visible objects. Instruction in the primary grades should be given by means of objects ; the *thing*, first. At all ages the undi-

vided attention is a pre-requisite to progress in school studies. The means of getting it are a test, not only of a teacher's natural fitness for his work, but of his honesty of purpose. In general, if a teacher cannot get the attention of his pupils, the fault lies with him, not with the pupils. The majority of children are not only willing, but anxious to learn. When they are not interested, there is a natural reason for their lack of interest.

HABITS OF PROMPTNESS.—Promptness is a virtue of incalculable value.* It is a measure of purpose and integrity. Promptness in executing the daily programme of school is of the greatest importance. The school should begin at precisely the time stated; not a few minutes earlier, nor a few later. Every recitation should be called at the exact minute given in the programme, and ended at precisely the time stated.

*This, as a habit, is essential to the teacher. He should be punctual in everything. He should always be present at or before the time for opening the school. A teacher who goes late to school once a week, or even once a month, can not very well enforce the punctual attendance of his pupils.—*Page.*

It should be neither longer nor shorter than the time appointed for it. Teaching a pupil promptness by example is better for him than teaching him arithmetic by rule.

The school furnishes many opportunities for training in promptness, or punctuality. Experience proves that promptness is a habit—the result of training. The time set for a performance has nothing to do with the punctuality of the audience. If tardiness is permitted in a school, there would be as many pupils tardy at 10 o'clock as at 9 o'clock. The value of training in habits of promptness is felt throughout life.* Training is the pupil's greatest need—this is the primary function of the school.

HABITS OF OBEDIENCE.—A cheerful obedience to legally constituted authority is a mark of good breeding. As soon as the will of the child begins to show itself, habits of obedience should be inculcated. The school, next to the home,

* I could never think well of a man's intellectual or moral character, if he was habitually unfaithful to his promises.—*Emerson*.

furnishes the greatest opportunity for training in habits of obedience. It is not only the legal but the moral duty of the teacher to train his pupils in habits of obedience.* The teacher is the law-giver. His authority is supreme, if exercised within just and reasonable limits. The highest courts have declared his right to demand obedience of his pupils. Without the legal and moral right and power to govern his school, the teacher would often be compelled to abandon it. It is as much the teacher's duty to train pupils in habits of obedience as it is to train them in methods of arithmetic. The primary office of the school is training in habits, not "cramming" with facts.

MORAL HABITS.—The school should train children in habits of politeness and truthfulness. The practice of "fibbing" by the girls and lying

*The manners of pupils are too much neglected in most of our schools, and, I am sorry to say, in most of our families. Our youth are growing up with all the independence of sturdy young republicans,—and, in their pride of freedom from governmental restraint, they sometimes show a want of respect for their seniors and superiors, which is quite mortifying to all lovers of propriety.—*Page*.

by the boys should not be permitted to grow into habit.* School “fibbing” and lying are much like society “fibbing” and lying; they do not suggest total depravity, but expediency. They should be dealt with firmly, but kindly. Before the child is hedged in by formal restrictions, he can be turned in the direction which his character will ultimately assume. Education should not only train the child in proper habits, but it should strive to wean it away from improper ones. It should combine the acquisition of good habits with the destruction of bad ones. Improper habits are forgotten only by disuse. Even an occasional revival of a bad habit tends to make the substitution of proper habits more difficult. The strength of a habit is proportional to its age and to the frequency of its revival.

*The moral or virtuous character is the resultant of the several forms of self-control carried to the point of perfect habits. Thus a perfect moral character includes the familiar habits involved in a wise pursuit of individual good, such as industry, orderliness, temperance, the habitual control of the feelings, or moderation, and the firm control of the thoughts involved in reasonableness. It includes further the habits implied in a perfect fulfillment of human duty, as obedience, courtesy, veracity, justice, and beneficence.—*Sully*.

In its incipency it is weak, but it steadily grows in strength. Habits dull the faculties ; the frequency of an act tends to make it automatic, yet right habits are the only guarantees of right conduct. The school should so restrain the pupil that his opportunities for seeing bad examples and practicing bad habits are reduced to the minimum. At all periods of life the conduct of a person depends largely upon his environments.

The child takes his first lesson in civility when he is required to treat his associates with politeness and deference. Teachers should foster a sense of honor in all their relations with their pupils. But this cannot be done through formal ceremonies. Only the *real* educates. Even at the risk of trespass upon the duty of home, the school should insist upon proper habits. Habits are more valuable and more lasting than school-book facts ; they are the elements which determine character.

The real character and force of habit are hardly understood by the young teacher. "Habit

goes further than precept, for it is both a state and a disposition.”* By repetition the mind is predisposed. Thus habit not only saves time, but it saves power. This is true, whether the habit involves mental or physical action. Practice not only selects the proper mental faculties, but it also selects the proper physical powers. Habit, whether of mind or body, is automatic

* No action can be acquired unless a faculty for it belongs to the constitution of the being who attempts to perform the action; every action can be rendered more perfect by habituation. The laws of habit are of prime importance in education, for its principal aim is to induce certain habits of mind and body in the pupil. And yet its aim is not to produce mere automata. Pursuit of truth, submission to rightful authority, and industry are general habits absolutely necessary to a well-educated mind. The first condition of progress in knowledge is the formation of proper habits of study. The school cannot impart great learning, but it may form in the learner habits that will, in the course of a life-time, lead to great accomplishments. Attention, patience, and activity are the cardinal virtues of scholarship, and these are the most precious fruitage of the school. In the earlier stages of education, the first duty of a teacher is that of a drill-master. His efficiency does not depend so much upon the knowledge he imparts as upon the habits he induces. But there is danger of extreme habituation. No mere machine, however perfect, can perform the functions of a man. As the mechanical theory of mental action fails to account for the whole of the psychical life, so the mechanical theory of training fails to produce an educated mind. Therefore, while the teacher should endeavor to aid the learner in forming proper habits, and thus render certain actions as nearly as possible automatic, he should not forget that by this very process the power of self-direction is liberated for new adaptations, and this power should be guided along the path of progress.—*Hill's Psychology.*

and mechanical. That is, we are not conscious of the successive processes involved in an act. Thus it is clear that habit tends to make not only physical life, but also soul life, mechanical. The will decides, and habit accelerates the execution. The process, once begun, goes on of itself. Habit thus relieves the mind of the burden of surveillance, and leaves it free for higher activities. In short, life itself is the sum of one's habits. Standing depends upon character ; character, upon habits. A man's personal habits often determine his social standing. Cleanliness usually carries with it order and deference ; uncleanness, disorder and disrespect. Promptness usually carries with it honor and truthfulness.

The nature of education is determined by the nature of mind—that it can develop what it is in itself only by its own activity. Mind is in itself free; but, if it does not actualize this possibility, it is in no true sense free, either for itself or for another. Education is the influencing of man by man, and it has for its end to lead him to actualize himself through his own efforts. The attainment of perfect manhood as the actualization of the freedom essential to mind constitutes the nature of education in general.—*Rosenkranz*.

CHAPTER IX.

METHOD IN EDUCATION.

A clear conception of the functions of a school is necessary to a proper adjustment of its work. The office of elementary schools is neither mastery nor information, but habits and discipline. Instruction can only unfold; it cannot create.

The first duty of the school is to teach children to think, and the second is to discipline them in methods and habits which develop moral character. These are the highest functions of the school. If character concerns this life only, every lesson in school should carry with it a positive moral influence. Right methods never permit a pupil to run to waste; they save what he has, and help him to add to it. Method may be a hindrance or a help, as nature always censures

or compliments. It may depress and enslave, or inspire and liberate; it is the mother of habit. Method should encourage individuality.* The personality of every child is entitled to supreme regard; it is his capital stock, it is *he*. Pupils cannot be made over; they can only be directed. Method cannot be described nor copyrighted. It is a compliment to few for the benefit of many. The tact and talent which can govern and teach are not found in every family. Method is self; it is the man. The teacher *is* the method, for he is always more personal than any method. Sound method vitalizes the moral and intellectual nature of pupils. Instruction which merely imparts information does not habituate the pupil. Mere learning has no power to establish habits or to mold character. A man may have his head

* The condition of the learner should not be one of passive reception, but of earnest self-exertion. One trial of strength should induce other trials; one difficulty overcome should excite an ambition to triumph over other difficulties. The teacher should create interest in study, incite curiosity, promote inquiry, prompt investigation, inspire self confidence, give hints, make suggestions, tempt pupils on to try their strength and test their skill.—*J. P. Wickersham.*

so full of books that his brain cannot work. Information is a good thing, but thought-power is a better thing. We must not mistake book learning for thought-power.* Intellectuality is a condition of the mind, not merely an accumulation of facts. One may be learned, yet intellectually a bankrupt.

For convenience of treatment, this chapter is divided into five parts, viz.: PURPOSE, KNOWLEDGE, DEFINITENESS, DETAIL, and INTEREST.

PURPOSE.—Purpose is aggressive. An ideal teacher is a leader. No man can be a mere fol-

* That education is best, not which imparts the greatest amount of knowledge, but which develops the greatest amount of mental force. The educational value of the acquisition of knowledge is to improve the natural powers of thought and judgment, and to enable the learner to deal with the masses of observed facts which press more and more heavily on us as we have to move amid the complications of mature life. In acquiring knowledge the mind is naturally active, and not merely passive. The active element is most precious, and modern education often tends to strangle it. Yet instruction which does not add increased energy to the thinking powers is failing its purpose. Learning cannot be free from drudgery, and a great deal of the process of teaching and learning—say what you will—must be a tax on patience and endurance; neither can we entirely dispense with the mere mechanical exercise of the memory; but if the method pursued is correct, the drudgery ends in an increase of the energy of the mind, and a desire and a power to advance to new knowledge and discovery.—*T. G. Rooper.*

lower and succeed. Success is the child of personal power. Principles are universal in their application, but the manner of applying them is a personal success or a personal failure. Intelligent and unselfish purpose is the essential element of method. Purpose solves most difficulties, and kind nature does the rest. No amount of text-book knowledge can ever fill pupils with a zeal for learning, if purpose is wanting in the teacher. Enthusiasm—the enthusiasm of personal conviction—is the mother of lasting impressions. The quality of the work done, rather than the quantity, determines the value of the opportunity. To dream in school is to put the school to sleep. Negative people cannot lead others. It is not only what is done, but how it is done, that develops mental power, and relates knowledge. As an art, instruction aims at the realization of particular ends—the understanding or mastery of certain subjects.

· KNOWLEDGE.—Knowledge is an absolute need. “What thou dost not know, thou canst not tell.”

The mere ability to teach the branches required by law does not equip one for the school-room. Children need teachers of culture, to inspire them with right motives and correct principles. Teaching divorced from ample knowledge of the subject is always barren of satisfactory results. Mastery of a subject naturally suggests the proper method of teaching it. Scanty information makes a teacher timid and uncertain, hence not an inspirer. The greatest outcomes of method are inspiration and thought-power, not mere learning. To feel, to think—these outrank learning.

DEFINITENESS.—I believe in keeping a definite object constantly before the pupil. Want of directness of method is loss of energy; hence the teacher should keep constantly before the pupil the purpose of the lesson. Concentration not only creates interest, but maintains it. Nothing is more encouraging than results. The business of the school is *drill* until proper habits of study are firmly fixed. Teaching, like the rays of light

which pass through a convex lens, should converge to a point. Shoot with a rifle; the shotgun is the weapon of a wanderer. By anticipating too much, we get too little. The school is a place where pupils should be required to exhibit themselves. It is the teacher's duty to direct, the pupil's to do. Do not talk your school to death. Some teachers grow into the talking habit, and the habit unconsciously enlarges until they become talking machines. Pupils soon learn the habits of a teacher, and act accordingly. If a large portion of the recitation-time is used by the teacher in airing his knowledge of a subject, the pupils are licensed to idleness during study hours.

DETAILS.—Avoid the excessive detail of our school books. Seek to teach the *thing*; the exceptions will take care of themselves. Concentration upon essential facts and principles will establish habits of study far more valuable and lasting than memory recitations of mere detail. There is little soul food in detail of any kind.

Life is too short to spend a large part of it upon the non-essentials. Since a large percentage of text-book facts learned in school are forgotten within a year after the pupil quits the school, it is clear that a school is only a means to an end. No one is a fit leader whose life is absorbed in discussing the difference between "tweedle-dum and tweedle-dee." Teachers should recognize the educational value of the general truth that "The letter killeth, but the spirit maketh alive." It is the detail of the professional theorists which not only confuses the man of affairs, but which makes the simple mysterious.*

If much of the time spent in the usual routine studies were spent upon the elements of the natural sciences, children would leave school with a greater love for knowledge and a greater reverence for God. The great truths of history, science, politics, and Christianity are the forms of learning which give meaning to life. It is safe

* Details are always melancholy and should be left to the imagination of the reader.—*Emerson*.

to say that half the pupil's time is often wasted in a useless drill upon details. To this sad fact add the wastage that comes from defective methods, inexperience, and changes of teachers, and we have a glimpse of the true conditions of our schools. We will then see the need of training schools and higher ideals.

A review of our own lives would afford each of us a valuable lesson in pedagogics. Only leading events would come up before us in the review, the minor ones having been long since forgotten. Not one event in a hundred could be called up, and not one in a hundred would have any meaning if it were remembered. We cannot claim that it is necessary to study minor detail as a means of discipline, for the wisest and greatest have died with only an imperfect knowledge of the leading events of the world, or of the mysteries of nature. But we cannot hope for much improvement till the teachers are trained in methods. So long as the great majority of teachers are untrained we shall teach books,

rather than subjects. The need of the teacher is training in methods; of the pupil, drilling in the essentials; of the parent, a fuller appreciation of the value of education.

INTEREST.—Interest is the beginning of progress. Without interest on the part of the pupil, instruction is almost fruitless. Interest depends on relating the present to the past—the subject under consideration to those that have been studied. Every lesson should have a marked relation to the preceding lesson; every subject to the preceding subject. The mind is not interested in the isolated or the meaningless.* Inter-

* One great art in teaching is the art of finding links and connections between isolated facts, and of making the child see that what seems quite new is an extension of what is already in his mind.—*T. G. Rooper.*

Detached facts on miscellaneous subjects, as they are taught at a modern school, are like separate letters of endless alphabets. You may load the mechanical memory with them till it becomes a marvel of retentiveness. Your young prodigy may amaze examiners and delight inspectors. His achievements may be emblazoned in blue books, and furnish matter for flattering reports on the excellence of our educational system; and all this while you have been feeding him with chips of granite. But arrange your letters into words, and each becomes a thought, a symbol waking in the mind an image of a real thing. Group your words into sentences, and thought is married to thought and produces other thoughts, and the chips of granite become soft bread, wholesome, nutritious, and invigorating.—*J. A. Froude.*

est is a real thing; it cannot be created mechanically. Inspiration is not a mechanical product. Interest in school studies can be awakened only by knowing the past and its relation to the present. The laws of association suggest method in presenting text-book matter to pupils. The proper application of the principles of reproduction and association would not only save half the time now wasted in our schools for the want of a knowledge of right methods, but it would transform many present asylums for the oppressed into pleasant homes for the inquiring. It would change the pessimistic "crammers" into optimistic leaders. Conscious success in school work depends upon a knowledge of the laws which govern the growth of mind.

Without interest and application on the part of the learner, instruction avails but little. The pupil must study. The mind develops its power, creates its wealth. Teachers, universities, and libraries cannot educate a student. He must educate himself. Culture is not a gift, but an

acquisition. Even teachers of culture, experience, and tact can only arouse, stimulate, and suggest. The pupil must do the studying, and the sooner he learns this fact the better.* The value of instruction depends upon the character of the habits it establishes, more than upon the facts learned. If pupils do not love to study, it may not be their fault. If they are not interested, a cause may be found in the teacher, the method, or the matter. I do not believe the average pupil is either silly or lazy. School waste is due not so much to the natural indisposition of pupils to study, nor to their incapacity to drink in knowledge, as to the methods of instruction.

*The teacher should never do for the child what it can do for itself. It is the child's own activity that will give strength to its powers and increase the capacity of the mind. The teacher must avoid telling too much or aiding the child too frequently. A mere hint or suggestive question, to lead the mind in the proper direction, is worth much more than direct assistance, for it not only gives activity and consequently mental development, but cultivates the power of original investigation.—*Edward Brooks.*

Man is the only fit subject for education. We often speak, it is true, of the education of plants and animals; but even when we do so, we apply other expressions, as “raising,” “breaking,” “breeding,” and “training,” in order to distinguish it from the education of man. “Training” consists in producing in an animal, either by pain or pleasure of the senses, an activity of which, it is true, he is capable, but which he never would have developed if left to himself. On the other hand, it is the nature of education only to assist in the producing of that which the subject would strive most earnestly to develop for himself if he had a clear idea of himself. We speak of raising trees and animals, but not of raising men; and it is only a planter who looks to his slaves for an increase in their number.—*Rosenkranz.*

CHAPTER X.

METHOD IN EDUCATION.—CONCLUDED.

Pupils are not interested in mere words. Interest depends upon suggestion. The soul is a real thing; its longings cannot be satisfied with the dress of thought; it requires ideas to suggest ideas. The old *a, b, c*, method of teaching the names of the letters is an illustration of the meaningless in teaching. The present method of teaching spelling in many schools is akin to the old method of teaching the names of the letters. How does the oral spelling of long lists of words whose meanings the pupils do not know, interest them? How does remembering them enrich their vocabularies? How does such instruction awaken soul-life? How does it develop intellect or feeling? Why should pupils

who spell correctly the whole list be marked 100? Will some formalist answer?

Interest depends upon interpretation. How does merely calling the words of a reading lesson, primary or advanced, interest pupils? Words are not ideas. The mind is not interested in automatic action—its pleasure is found in its own activity. Why should our higher readers be scrap-books? My ideal reader is a small book of complete selections. Each selection should be studied until mastered. It should then be studied for composition work. Such study of reading lessons will create an appetite for literature; it will create ideals, and mould character.

Pupils do not study arithmetic six or eight years to learn arithmetic, but to learn to think. All the arithmetic nine men in ten ever need can be learned in a short time. Why should we teach fractions and percentage by cases? Why not learn the nature of a subject, then treat it as a unit? How does the study of arithmetic by

rules and cases interest pupils or lead them to rely upon their own reason? How does such a study of arithmetic qualify them for business? How does "ciphering" for answers and "per cents" lead to independent thinking? How does merely believing the statements of others upon any subject at any period of life create interest, enthusiasm, or purpose? There are too many arithmetics, and generally there is too much matter in a book. Two small arithmetics of one hundred and fifty pages each should cover the needs of common schools, graded and ungraded.* The ideal arithmetics would contain no cases, rules or answers. Cases and rules—formal divisions and formal directions—discourage think-

*The first great reduction should, I believe, be made in arithmetic. I find that it is very common in programmes of the grades to allot to arithmetic from one-eighth to one-sixth of the whole school time for nine or ten years. In many towns and cities two arithmetics are used during these years; a small one of perhaps one hundred pages, followed by a larger one of two or three hundred pages. Now the small book usually contains all the arithmetic that anybody needs to know; indeed, much more than most of us ever use. On grounds of utility, geometry and physics have stronger claims than any part of arithmetic beyond the elements, and for mental training they are also to be preferred. By the contraction of arithmetic, room is made for algebra and geometry.—*Pres't Eliot, Harvard University.*

ing. Pupils do not need specific directions so much as suggestion. Rules do not yield understanding. Direction is poor inspiration.

SUGGESTION.—Substitute elementary algebra for higher arithmetic. It is not so difficult, and is better adapted to training the reason. It *is* higher arithmetic in symbolic characters. The “puzzles” of higher arithmetic yield readily to algebraic solutions, thus saving the pupil’s time and energy for other studies. The study would interest, because it deals in general notions; it establishes general truths.

How does parsing words in English interest pupils? Relations seldom depend upon the form of a word. Prepositions show relation in English. The verb has but one change of form to express a change of number and person, and but one to indicate a change of tense. There is not a noun in the English language which has a case-form different from the nominative, if we regard the possessive form as a possessive adjective. The different forms of the

pronoun can be learned in an hour. Declension and conjugation do not interest pupils, because they have almost no application. Mere routine does not interest at any age. How does the making of diagrams assist pupils in comprehending the meaning of a sentence or in seeing the relations of the grammatical elements, when the concept must be in the mind before it can be placed upon the blackboard? At best, it is but a means of instruction for the teacher.

Parsing and analysis, limited to a month or two in a life-time, may serve us indirectly; the former by way of fixing what little we have of inflection and form, the latter by way of exhibiting the structure of sentences. But why should we repeat a hundred or more times in a year: "John is a proper noun, third person, singular number?" and "This is a simple, declarative sentence; the subject is——, the predicate is——." Do these formalities require thought? Do they enrich the soul? Formal analysis, whether oral or written, has but little value in English. Sepa-

rating the thoughts of others into arbitrary grammatical elements cannot long interest pupils. It is too mechanical, too bookish. As the English language has but little of formal order, formal analysis is valuable only to the extent that it helps the pupil to determine the meaning of the sentence. Analysis is not an end but a means to an end. As the English language is almost barren of inflection, it has little for the pupil to commit to memory; hence little time should be spent in reciting definitions, declining nouns, conjugating verbs, and analyzing sentences. Very much of the time spent in such work is wasted. The teacher of English is young in years, if not in thought-power, who does not see this truth.

Pupils do not study grammar to learn to parse words and analyze sentences, but to learn to express thought. The ability to speak and write English with accuracy and effectiveness is the only true measure of a practical knowledge of English grammar. Teachers should remember

that any method of teaching English which does not enable a pupil to express his ideas clearly and forcibly is a failure. In primary language-work, a large portion of the time is generally wasted in routine. It is routine drill in detail that robs the pupil of inspiration, opportunity, and purpose. Interest in the study of language is proportional to the thought-content of the exercises. The pupil must think into habitual use grammatical forms and relations, if they are to have a lasting value.

In teaching English, why should we not recognize the fact that it is comparatively an uninflected, formless language? How limited the inflection of nouns, verbs, and adjectives, compared with the same parts of speech in Latin! In English, changes in form to denote changes in meaning are few and simple. All there is of true English inflection in nouns, verbs, and adjectives, could be learned in a week. The Latin has many case-forms; the English has separate words, specific for each person and number. In

English, the verb seldom changes its ending to denote person, number, mode, or tense; the use of a word seldom depends upon its form, but generally upon its relation to other words. The part of speech to which a word belongs cannot be determined at sight, but by its use. The same form of a word may do the work of several parts of speech. Thus, in English, memory is subordinate to reason.

These organic differences show that it is absurd to apply the methods of the dead classics to the living English. As there is but little of inflection in English, pupils should be put to making sentences as soon as they can write their names. We should have them express in writing the leading facts in their reading, history, and geography lessons. The exercise is not only an admirable training in language, but greatly assists in remembering the facts themselves. If much of the time now spent in the formal work of declining nouns, conjugating verbs, and comparing adjectives and adverbs were spent in a careful study

of the meaning of the auxiliary verbs, it would yield much better results than it does. If much of the time now spent in analyzing and making diagrams of sentences were spent in giving the principal parts of the irregular verbs, we should soon hear purer language on our streets and in our homes.

The English language is so free from inflectional endings and formal order that it requires but little time to master its few grammatical facts. A few weeks of practice in writing English under the instruction of a competent teacher should put a pupil well on his way to a mastery of its use by his own efforts. We owe a debt of gratitude to the idol-breakers who are working out rational methods of teaching our mother-tongue. But the debt of the teachers is little when compared with what the pupils owe those who have saved them from the stupid routine of the formalist.

In English, the needs of the pupil suggest the method. It is the use of language which inter-

ests the pupil, not its grammar. It matters not to the learner whether we have three or four modes, if he uses the language clearly and forcibly. In the study of language, especially the English, theory without practice has little or no value. The experience of every thoughtful teacher testifies to the foolishness of memory-stuffing in teaching English. In compelling children to memorize rules they do not understand, you make them slaves to mere form. The ability to quote a grammar from the title page to the end would in no way improve the speech of the unthinking. The recitation of grammatical facts will no more make correct speakers and writers than the recitation of moral maxims will make good citizens.

The primary object of the study of grammar is to learn the logic of expression. There is nothing inspiring in the mere ability to parse words, analyze sentences, and "pick out" grammatical inaccuracies. Language is a means of expressing thought, and its correct use can be

acquired only by using it in the expression of thought; no amount of blank-filling and sentence-patching can materially benefit children.* Tinkering sentences yields little or nothing because it requires little or nothing. Mere formalism asks but little and is content with less. Much of what is called method in primary language work is merely a cheap device to amuse pupils and to disgust them with their mother-tongue.

We learn to use good English by the reflective

*True ease in writing comes from art, not chance,
As those move easiest who have learned to dance.—*Pope*.

Write, write, write, there is no way to learn to write, except by writing.—*Emerson*.

Rules and concords no more condition clear expression than they determine forcible thinking; you may parse a boy through "The Course of Time" and "Paradise Lost" without eliciting a spark of feeling or a glint of intelligence.—*Prof. Woodward, Wofford College*.

A parrot-like knowledge of inflection and rules has ceased to be the goal of linguistic scholarship, and so far as any useful end is concerned, the mere ability to parse and analyze an intricate sentence counts for little.—*Prof. Huffcut, Cornell University*.

It is constant use and practice that makes good speakers and writers; no one ever changed from a bad speaker to a good one by applying the rules of grammar to what he said; in order to use English correctly it is not necessary to study English grammar, but the study of grammar is useful to us because it helps and hastens the process of learning good English.—*Prof. Whitney, Yale College*.

use of it, and in no other way. Ease in writing comes from writing, not from the study of books. Correctness and vigor of expression can be acquired in one way only—by becoming familiar with the structure and the use of the sentence. Bad practices are dislodged only by a reflective use of words. What effect, if any, have rules upon the speech of the boy whose companions constantly violate the laws of good usage? Experience says that cautions and rules do not yield culture nor character.

Grammar is a science or it is nothing. Its difficulties grow out of its scientific nature. It is an interesting and profitable study to those who have acquired a “somewhat reflective use of language,” but means nothing to those who have not. The proper study of English has a disciplinary value second to no other study, but soulless formalism has no power to develop thought or to mould character.

SUGGESTION.—In place of the so-called practical grammar in the lower grades, substitute

a first book in natural history. 'This subject will interest pupils of those grades, because it treats of living realities within the limits of their experiences. It will interest because it is a study of the living concrete.

Pupils do not study geography to learn to locate hills, rills, villages, and towns, but to learn how God has adapted the earth to the needs of man—a thing little discussed in the school-room. The superlative merit of the present method of teaching geography in most schools is the fact that nine-tenths of the cold, isolated facts, stuffed into the minds of the pupil, are forgotten before the close of the term.* Unfortunate, indeed, is the pupil who can remember them. 'The area of the leading countries, the principal occupations and resources of the people, the location of the most important cities, rivers, and mountains

*Geography is now taught chiefly as a memory study, from books and flat atlases, and much time is given to committing to memory masses of facts which cannot be retained, and which are of little value if retained. By grouping physical geography with natural history, and by providing proper apparatus for teaching geography, time can be saved and yet a place made for much new and interesting geographical instruction.—*Pres't Eliot, Harvard University.*

should constitute the essentials of school geography. Mathematical geography is quite neglected to hunt up unimportant streams and villages.

How does locating small islands, towns, lakes, rivers, and mountains lead pupils to see how wonderfully God, the Creator, has prepared the earth for the needs of man? How does bounding states develop reason, feeling, or imagination? Teaching geography should be something more than a mere recitation of text-book facts. Through the use of descriptive words, pictures, and maps, the pupil should create mental images of the surface of the country. He should fix the ideal pictures in his mind through imaginary journeys. No other study in the common school course requires so much of the imagination; no other has a more vivid meaning to the pupil if it is properly taught.

SUGGESTION.—Enrich the course in geography by shortening it. Omit the greater part of mere “place” geography. Enrich the contents by giving more attention to the growth and influ-

ence of the great commercial centers. Enrich the subject by giving more attention to the effect which oceans and mountains have upon climate, occupation, commerce, and character. We have too much "book" geography. For the so-called advanced geography, substitute elementary physics and physical geography. The elementary principles of philosophy are easily understood by pupils of thirteen years. These are interesting to pupils, because they come within their daily observation and experience, and because they have meaning.

Pupils do not study history to acquire mere names and dates, but to learn causes and effects. The truths of lasting importance are those which relate the causes of events, and which establish policies. The fewer the heroes and the scarcer the unimportant dates, the better. Why should we teach the wars by years? The War of the Revolution, like the Civil War, is a unit in American history, and should be studied as a whole. Do we not lose sight of the principles for which

we fought in our search after dates and years? The detail of events may be truly stated, but it may be of no importance. Is the opportunity of school life so extended that pupils can spend a year or more upon United States history?

How does reciting dates and names in the study of history develop moral character—the chief aim of the study? It matters little on what particular dates battles were fought, or what particular generals commanded the armies. Names and dates are for newspaper offices, and can always be found in cyclopedias. It is little short of barbarous to cram the minds of pupils with the dates of second and third class battles, and the names of undistinguished generals who commanded them. It is little short of criminal to require pupils to commit the text of primary histories, but this is still done in many schools.

A little reflection will convince the teacher yet in his “teens,” that minor events cannot interest pupils nor impress upon them the lesson which history teaches. Instruction should strengthen,

deepen, and nourish. It should have meaning. History should be taught topically, seventy-five per cent of the commonly recorded names and dates being omitted. The causes of the wars, the principles fought for, and the victories won should be understood. The characters of the leading men should be studied—this is history. A study of the motives which led to the wars is a study of ideal men. In such a study of the history of the United States, pupils are interested. It is a study of realities; it associates principles, struggles, victories.

If we would have greater interest and better results, we must eliminate unimportant matter in the text-books, and master the essentials. It is safe to assert that much time is spent upon valueless detail and routine drill—upon matter which neither informs nor educates. But our schools are better than they were twenty-five years ago. Defects must be seen before they can be remedied; waste must be discovered before it can be prevented. Discussion is the need.

The teacher should thoroughly understand what he attempts to teach. It is destructive of all life in the exercise, if the teacher is constantly chained down to the text-book. I have no objection, indeed, that he should take his text-book with him to the class, and that he should occasionally refer to it to refresh his own memory or to settle a doubt. But who does not know that a teacher who is perfectly familiar with what is to be taught, has ten times the vivacity of one who is obliged to follow the very letter of the book? His own enthusiasm glows in his countenance, sparkles in his eye, and leaps from his tongue. He watches the halting of the pupil, perceives his difficulty, devises his expedient for illustrating the dark point in some new way, and, at the proper moment, renders just the amount of assistance which the pupil needs. Not confined to the text, he has the use of his eyes; and when he speaks or explains, he can accompany his remark with a quickening look of intelligence. In this way his class is enlivened. They respect him for his ready attainment, and they are fired with a desire to be his equal.—*Page.*

CHAPTER XI.

THE RECITATION.

The recitation is the heart of school-life. It is the test of a teacher's fitness, and of a pupil's purpose. The recitation, directly and indirectly, is the moral force of the school. It appeals directly to a pupil's individuality. Lost, indeed, to all other means is the pupil who cannot, and who does not, find the recitation the most inspiring and helpful school association. Every recitation should begin with a review of the preceding lesson that the pupil may see that the new lesson is but a continuation of the preceding one.

A recitation may be divided into three parts, viz.: RESPONSIVE RECITATION, VOLUNTARY RECITATION, QUESTIONING RECITATION.

RESPONSIVE RECITATION.—When the class is

seated for recitation, the teacher should take his place directly in front of the pupils, stand squarely upon his feet, without a text-book, and ask one of the class to name the subject of the lesson. Then he should call upon "John" or "Mary" to recite. He should merely say "John" or "Mary," but one word, whereupon "John" or "Mary" rises, stands erect, recites, and quietly takes a seat.

Limit a pupil to a single statement, that all may take part in the recitation. If the statement or illustration is made in a careless or indifferent manner, or in slovenly English, let the teacher say, simply, "again," and see that the second attempt is better than the first. Just the little word "again;" it is not necessary for the teacher to say, "John, you may try that again." Let him save five words and the noise and time required to use them. The little word "again" will do more for a pupil than a professional lecture. It is as applicable in a primary as in a higher grade—in a country school as in a town

school. Every recitation should be made more than a recital of text-book facts. It should be made a lesson in training more than the memory. It should be made a language lesson.

In this way the teacher may call upon all of the class, if necessary, to cover the matter of the text. He should call the given name. The pupil should rise, define a term, give an illustration, or make a statement, and sit down. When on his feet, he should stand until he recites or until he fully excuses himself. The teacher should not help him to recite, nor give suggestive hints in the form of helpful questions. The pupil must understand that "Life is real, life is earnest," and that there is no easy place in school-work, or anywhere else.

VOLUNTARY RECITATION.—This division of the recitation privileges a pupil to volunteer additional statements or illustrations. A volunteer may be known by holding up his right hand. Try to give to all an opportunity to volunteer. The teacher should permit no one pupil to mo-

nopolize the hour, nor permit any one to use a hundred words to tell what he should express in twenty-five. The liberal use of the little word "again" will soon cure class verbosity, and will do more toward the acquisition of good English than the study of formal rhetoric in later years. Require and accept only correct and concise statements. Accuracy of statement is more valuable than accuracy of result.* Clearness and brevity of statement show that the lesson has been studied. A reflective use of words in the expression of original thought gives more of hope

* It is a common mistake to make the acquisition of knowledge the chief end of school training, and this is followed by the mistake of making knowledge, often the verbal expression of knowledge, the measure and test of teaching. This results in cramming. It must ever be kept in mind that the chief intellectual end of teaching is mental power—power to acquire, power to express, power to apply knowledge—and that the proper test of mental power is mental action. A clear grasp of this principle makes teaching an art—the art of training.—*Dr. E. E. White.*

Without doubt, the best system of teaching, like the best logic, is still that which we make for ourselves through study, experience, and personal reflection. Certainly, it is not required to have learned by heart and recited, as some authors of teachers' manuals still demand, a catechism of method; but in order to aid the reflection and guide the experience of each novice in instruction, the book is very far from being useless, though it do nothing more than stimulate personal reflection.—*Compayré.*

than the "parrot-like" recitations of the sublimest thoughts of others.

QUESTIONING RECITATION.—Let the teacher put questions to the class as a class, and allow a moment for reflection, then call upon "John" or "Mary" to answer. He should require an immediate and complete answer. A pupil should never be permitted to learn the lesson after coming to the class. Definitions and principles should be clearly stated and amply illustrated. Without illustration, teachers do not know whether a "parrot" or a real pupil has recited. Teachers should insist upon illustrations that illustrate. They should require an exhibition of the pupil's power to reason, rather than of his ability to remember. They should not require pupils to give definitions and rules in the language of the text-book, but in their own language. Words are only signs of ideas. If the pupil has the idea, he will find the words. Pupils do not go to school to memorize the words of others, but to learn to express original thought.

The recitation is not an end, but the means to an end.

Pupils should not be permitted to refer to their text-books during the recitation, nor should the teacher be dependent upon one. If a pupil can not recite without referring to the text-book, he is not prepared; if the teacher requires the book, he does not know the subject. If the recitation is only a test of what a pupil remembers of his lesson, it is a failure; if it is only a test of the teacher's knowledge of the subject as given in the book in use, the teacher is incompetent. A text-book is merely an outline, and some text-books are poor outlines.

The recitation of text-book facts is not a significant performance. Without earnestness of purpose, a teacher cannot lead; without the ability to lead, he is hardly helpful. If a pupil's attention is to be held, he must be interested, not merely made to recite. If the recitation does not mean investigation, it is a formal farce. If it is an opportunity for the teacher to sit in his

chair, cull out questions from the book, and look wise, it is merely a sickly burlesque.* If it affords the teacher an opportunity to exploit favorite pupils or to exhibit bright ones, it is not an ideal recitation. If it does not reach all of a class, especially the dull ones, it falls far short of its mission.

The recitation determines the habits of the pupils. If it is exhaustive, the pupils are forced to study. It should be a reality, not a mere

* The didactic method—the method of endless telling—thinking for the pupil—ordering him to get his lessons, has had its day.—*Payne*.

The primary principle of education is the determination of the pupil to self-activity—the doing for him nothing which he can do for himself.—*Sir William Hamilton*.

Children are not to be taught by rules, which will be always slipping out of their memories. What you think it necessary for them to do, settle in them by an indispensable practice.—*Locke*.

As a motive for every teacher to study carefully the art of teaching well at the recitation, it should be borne in mind that then and there he comes before his pupils in a peculiar and prominent manner; it is there his mind comes specially in contact with theirs, and there that he lays in them, for good or for evil, the foundations of their mental habits. It is at the recitation in a peculiar manner, that he makes his mark upon their minds; and as the seal upon the wax, so his mental character upon theirs leave its impress behind!—*Page*.

Cram is the rapid acquisition of a great deal of knowledge. Learning so acquired, though useful for a barrister, has less educational value than the public believe, for it does not promote but rather tends to destroy the active and constructive powers of the mind.—*T. G. Rooper*.

formality. The recitation hour is for the pupil, rather than the teacher. Say nothing that you can get the class to say. Do nothing that you can get the class to do.

The concert method of hearing a recitation is a stupid device, whereby the slower pupils are cheated out of all opportunity. It privileges the readier pupils to trespass upon the rights of the slower ones, and to monopolize the time.* It robs the teacher of an opportunity to note the individual standing of the pupils, and to give such needed help as special cases suggest. It masses; method should individualize.

The topic method seems to present many advantages over other methods. It requires the pupil to arrange systematically the special points in the lesson. This fact tends to train him in

*Rely not too much upon simultaneous recitation. This has become quite too fashionable of late. It had its origin in the large schools established some years since, known as Lancasterian schools, and perhaps was well enough adapted to schools kept upon that plan in large cities. But when this mode of reciting is adopted in our district and country schools, where the circumstances of large numbers and extreme backwardness are wanting, it is entirely uncalled for, and, like other city fashions transferred to the country, is really out of place.—*Page*.

habits of order. It gives him an opportunity to express himself in his own language. It is the easiest method for the teacher ; it puts the burden of the recitation upon the pupils, where it properly belongs. It gives to the teacher the best opportunity to observe the individual habits of his pupils. It tends to the concentration of the attention, not only of the pupil reciting, but of those in their seats.

But this way of hearing a recitation may not be the best for all. There is no universal best way of doing anything. Success is original, inspiration organic. No two persons succeed in the same way ; no two persons look alike, act alike, believe alike, live alike, or die alike.

A well-governed school, in my estimation, is so well poised, that is, so self-poised, that in the absence of the teacher, it will run on of itself till the nightfall, without noise or friction. Is this too much to expect? Fellow-teachers, we can take iron and brass and make a watch that will keep time when its owner is sound asleep; that will run correctly on for a year. He is a poor watchmaker who cannot make one that will run twenty-four hours. Can we do more with dead, dumb metal than we can with living, loving, throbbing human hearts? Can we accomplish more accurate, definite, and reliable results with our skilled hands than with our trained minds? Shall a teacher of immortal souls yield to a maker of machinery? Nay, verily.—
J. Dorman Steele.

CHAPTER XII.

THE SCHOOL.

If we would have a proper estimate of the function of a school, we should bear in mind that it is not a charitable institution, supported for the benefit of those who are temporarily in control of it as school officers and teachers, but that it is a public trust, supported by taxation for the sole purpose of educating the children of all the people. Free schools are supported by the state for the protection of the state. It is now admitted that the state has both the moral and the legal right to protect itself against ignorance, and to demand that all its children shall have an opportunity to acquire an education.

A school is an organization whose purpose is the education of children. It is a state institu-

tion, and should be conducted upon business principles. In its management there is, morally, no place for sentiment, favoritism, or for the needy friends of school officials. The rights of children transcend all forms of selfishness and the claims of unqualified "home talent." Home is often a very limited opportunity. The school should be free from all forms of local and official favoritism. If school boards would find qualified teachers, they must open the doors of their school houses to the competition of qualified teachers.

In connection with the above thoughts, I append a few suggestions touching the practical workings of a school in the hope that they may help some young teacher.

First, *THE PROGRAMME*.—Without a definite plan of working, definite results should not be expected. In school work, as in all other work, "we reap what we sow." The house-builder knows just where every stone or timber should be placed, before he begins to build the house;

the train conductor knows just when his train should arrive at every station on the railroad, before he starts the train. The teacher should know just what he is to do each day, before he begins the day's work. He should carefully arrange a programme of the daily recitations, as soon as possible after the opening of the term. Much thought should be given to the arrangement of the classes, and to the time allowed for each recitation. The youngest pupils should recite first, in both the forenoon and the afternoon, and should recite not less than four times daily. The time allotted to a recitation should correspond to the nature of the subject and to the age of the pupils, the more advanced classes and the older pupils requiring more time than the primary classes and the younger pupils. When, by trial, a daily programme is found satisfactory to both pupils and teachers, it should not be changed during the term.

Classes should be called upon to recite at precisely the moment given in the programme, and

should be excused from the recitation at precisely the time indicated. Even a "talking teacher" should subside when the "time is up." If the teacher permits one class to trespass upon the time of another, he disturbs the entire grade, and justly subjects himself to criticism. A teacher should never violate his own regulations. If he would teach promptness, he must be prompt; if he would have order, he must be orderly; if he would have his pupils respect his regulations, he must respect them himself. The recitation carries with it many opportunities to train pupils in habits of order, punctuality, and attention.

Second, RULES.—The fewer the rules, the better the government.* Pupils cannot be governed by rules, written or unwritten, nor inspired by set lectures on the beauty of right conduct. Rules may in some degree restrain; they cannot govern. There is no virtue in fear,

*Now my advice is, make but few rules, and never multiply them till circumstances demand it. The rule of right will usually be sufficient without any special legislation; and it has this advantage, that it leaves the teacher the largest discretion.—*Page.*

but in love. Love is the controlling force. Children are not machines, to be governed by some external force, but thinking, feeling, human beings, capable of self-government. Good rules do not make good pupils, but good pupils make good rules. Pupils do not like formal restrictions, but informal liberty. Human nature is opposed to *set* regulations. The merely formal and external has little or no meaning. Mere formalism cannot create feeling nor develop purpose; it does not reach the soul.

Many reasons might be given to show why schools cannot be governed by fixed rules: (1) No set of rules, however skillfully framed, can cover all the exigencies of a school. The unexpected happens every day in all schools, and must be met at the time and in the manner best suited to the individual case. (2) A rule without a penalty attached to its violation has no moral meaning. Experience shows that the same kind and the same amount of punishment should not always follow the violation of a rule or law. (3)

A rule not enforced is a dead letter and a bad example. Law should be not only acknowledged ; it should be obeyed. It is as much a teacher's duty to demand obedience as it is to teach arithmetic. Character is more valuable than facts. The teacher should be free not only to make the law, but also to fix the punishment. The teacher *is* the law.

It is well to have a general understanding with regard to the manner of entering and leaving the school-yard and the school-house ; also, with regard to the general deportment of the pupils upon the play grounds, and upon their way to and from school. With a few general suggestions, the teacher may safely trust the detail of the management of the school to the good sense of the pupils. Pupils are naturally honorable and trustworthy. Few, indeed, are the pupils who cannot be trusted. If teachers would have the respect and good will of their pupils, they must believe in them.

Third, DISCIPLINE.—Authority to direct and

to control others is derived from the need of others. Artificial restraint is necessary until children establish good habits under the direction of those whose duty it is to train them. It would not be right for parents and teachers to allow children to learn, through personal experience, the evil effects of all wrong doing. When habits of obedience become an element in the character of the child, the surveillance of the home and the school may be relaxed.

A school without discipline is like a business house without a head. Pupils respect authority when it is properly and impartially exercised. There is no conflict between personal liberty and just restraint—between discipline and kindness. The less the formal discipline, the better the order. Punishment should always be in proportion to the transgression; it should be graduated to meet the character of the offense. It is the certainty of punishment rather than its severity that deters evil doers. The criminal classes prefer to operate in those states which have on

their statute books the severest penalties for criminal offenses, because (as statistics show) the chances of acquittal are directly proportional to the severity of the penalty. This fact is born of the heart, and is a compliment to the progress of civilization. It goes far toward interpreting Christ's law of love.

Fourth, CORPORAL PUNISHMENT.—The discipline of the school should be maintained, even at the cost of corporal punishment or the suspension of the incorrigible pupil. The school should be preserved from disorder and the contagion of bad example. But such extreme penalties as corporal punishment and suspension should attach only to the worst forms of school offenses, and then only as a last resort. It is a serious thing to turn an incorrigible boy into the street, with the stain of suspension from school upon his name. It should never be done if it can possibly be avoided. It is generally admitted that a forced obedience through corporal punishment is better both for the pupil and the com-

munity than the suspension of the pupil. But pupils cannot be properly governed by brute force, nor by the recitation of moral maxims. Punishment which has for its object the reformation of the offender is righteous punishment; all other punishment is unjustifiable, unrighteous, and revengeful.* Punishment is not a form of retaliation. Only a diseased mind could find pleasure in undue or infinite punishment. Revenge is always destructive, forgiveness creative. Love is the corrective.

Fifth, EXAMINATIONS.—Every properly conducted recitation is an examination, not only of the class, but of each member of the class. The

*Punishment as an educational means is nevertheless essentially corrective, since by leading the youth to a proper estimation of his fault and a positive change in his behavior, it seeks to improve him. At the same time, it stands as a sad indication of the insufficiency of the means previously used. The youth should not be frightened from the commission of a misdemeanor or from the repetition of his negative deed through fear of punishment—a system which leads always to terrorism; but, although this effect may be incidental, the punishment should, before all things, impress upon him the recognition of the fact that the negative is not allowed to prevail without limitation, but rather that the good and the true have the absolute power in this world, and that they are never without the means of overcoming anything that contradicts them.—

regular recitations afford the teacher the only real opportunity to know the standing of the individual members of the class, and the individual members the only real measure of their class standing.

Formal examinations are usually oppressive and discouraging; formal tests are usually too formal and too mechanical. Few persons of any age can write out, under fixed limitations, all they know; and fewer still, all they feel. At best, the formal written examination is more a test of the memory than of the reason; hence it should never be made the sole basis of a pupil's fitness for promotion. Formal examinations, oral or written, assume an equality of mental and physical habits never found in any class; they assume an equality of home interest in school work never found in any community. They equalize pupils; right methods individualize them. They treat all alike; hence they are unjust and unfair. The grist is equally divided; the same result expected. The quick and the slow, the bright and

the dull, the good memory and the poor memory—all are massed—all wronged.*

Pupils differ in capacity, natural and acquired. Some pupils think more quickly, memorize more easily, and are more self-confident than others. But the quickest thinkers, the readiest memorizers, the most self-confident boys at fifteen are not always the profoundest reasoners at thirty. The purpose of a life cannot be measured by formal results. Mere formalism should never

*The opportunities of many an American youth have been blasted by an examination failure, and this, too, often due to nervous exhaustion. More young lives have gone out at the hands of the examination fiend than our school records show. It seems high time that our school policies should recognize the fact that children are not made of putty.

These narrow and technical promotion tests have been misleading as evidence of the actual attainments of pupils. The pupils in our schools have reached no such proficiency as the promotion examinations have indicated. The number of pupils reported as "perfect," or very close to perfection, has been marvelous. The vanity and pride of pupils and parents, and even of teachers, have not only been unduly flattered, but all have been much deceived.

They have perverted the best efforts of teachers, and narrowed and grooved their instruction; they have occasioned and made well nigh imperative the use of mechanical and rote methods of teaching; they have occasioned cramming and other vicious habits of study; they have caused much of the overpressure charged upon the schools, some of which is real; they have tempted both teachers and pupils to dishonesty; and, last but not least, they have permitted a mechanical method of school supervision.—*Dr. E. E. White.*

be accepted as evidence of purpose or character in any department of life.

But the formal, written examination has its uses in grammar grades and high schools. It furnishes a sort of collateral evidence of a pupil's standing for teachers and parents. If it is not made the only test of fitness for promotion, if it is not substituted for the more accurate knowledge of the teacher gained from the daily recitations, if it is not required oftener than semi-annually, in short, if not abused, it has a place in the higher grades.

Sixth, MARKING RECITATIONS.—At most, a teacher's CLASS BOOK is a record of guesses. Marking recitations is a formal device. It cannot in any way stimulate a class to greater effort, nor assist the teacher in conducting a recitation. Why should the teacher guess at a pupil's class standing four or five times a day? The time required to make the hourly entries in the "Class Book" is a severe tax upon the time set aside for recitations. Once a month is often

enough to make a formal guess at a pupil's class standing.* The scholarship as shown in the MONTHLY REPORT is a sufficient record for pupils and parents. One competent to conduct a recitation should always know the character of each pupil's recitation without making a formal record of it several times a day. Utter failures, or repeated failures, on the part of the same pupil, might be noted, but nothing more. It is a teacher's duty to know his pupils—to know them individually.

* For many years we have had here no marking system, class rank, honors, or prizes of any kind, unless the diploma of graduation be deemed such. Students have been asked to work for the sake of learning. Of course if any were indisposed to work they were sent away; but the appeal has been simply to the desire of the student to train and store his mind.

It is the conviction of those who had previously taught in colleges and universities which have the marking system, class rank, honors, and prizes, and are now teaching here, that the aggregate result under our system is far better. It is possible that in the former institutions a few men at the head of each class who are contending for rank attain to higher technical excellence in minute details of study; but we hold stoutly to the belief that broader, heartier, better work is done by the mass of our students than would be done under the other system, and that the spirit of study begotten by the simple appeal to study for the sake of its attainments and discipline is greatly to be preferred to that which is stimulated by the hope of pecuniary reward or class rank.—*Pres't Angel, University of Michigan.*

Seventh, PROMOTIONS.—Whenever a pupil is ahead of his class, promote him.* This suggestion does not harmonize with the *theory* of a graded school, but experience has proved that it harmonizes with the *practical* workings of all schools, graded and ungraded. A teacher has no moral right to limit a bright pupil to the progress of his class. Whenever the work of the class or of the grade does not tax a pupil with all he can do, promote him. Do not wait until

*The sole ground for promotion is reasonable fidelity. I venture to believe that this is the true ground of promotion in grammar-schools as well, and that by the sole use of this principle in promoting, the difficulty now under consideration would be much alleviated, if not done away with. The right time for advancing a child to the study of a new subject is the first moment he is capable of comprehending it. All our divisions of the total school period into years, and into primary, grammar, and high schools, are artificial and in most cases hurtful or hindering to the individual. The whole school life should be one unbroken flow from one fresh interest and one new light to another, and the rate of that flow ought to be different for each different child.

Uniformity is the curse of American schools. That any school or college has a uniform product should be regarded as a demonstration of inferiority—of incapacity to meet the legitimate demands of a social order whose fundamental principle is that every career should be open to talent. Selection of studies for the individual, instruction addressed to the individual, irregular promotion, grading by natural capacity and rapidity of attainment, and diversity of product as regards age and acquisitions, must come to characterize the American public school if it is to answer the purposes of a democratic society.—*Pres't Eliot, Harvard University.*

the close of the term. Industry is essential to interest and progress. Opportunity waits for no one. Dull pupils should not be degraded because they cannot make a certain per cent in a written examination. The exact mental power of a pupil cannot be determined by any formal process.* In all the relations of life, the individual has rights that society and institutions should respect. The rights of an individual pupil transcend custom, theory, and practice. Inherited beliefs and traditional practices should yield

* We believe that pupils who have performed their duty during the term in a satisfactory manner are entitled to promotion without further test. The principals are expected to visit the classes constantly during the term, and to become familiar with the character of the pupils' work.

* * * The combined judgment of class teacher and principal, based upon close observation of the pupils day after day, is, in our judgment, as good a test to determine promotions as can be found.—*John Jasper, Sup't Schools New York City.*

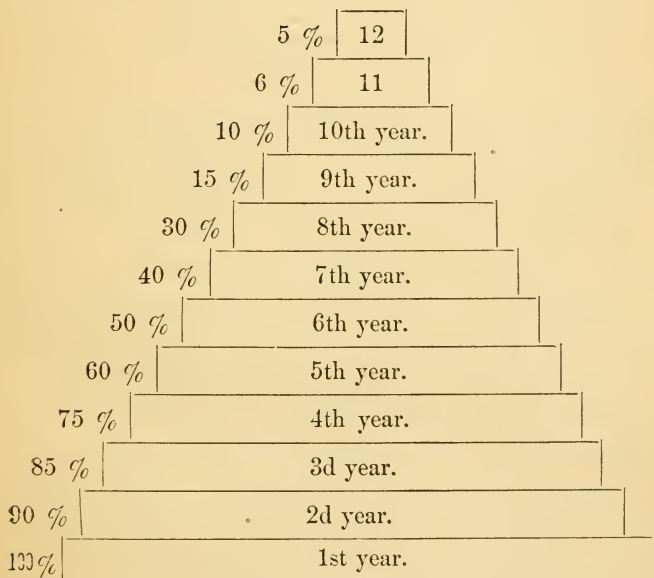
Experience shows that this assumed uniformity of conditions does not exist. The pupils in the several classes are unequal in mental ability and physical vigor; they do not possess equal ambition or application; they have unlike home advantages and assistance; sickness and other causes interfere with regular attendance; and their teachers are unequal in ability and skill. Moreover, the teacher of a given class may not be equally helpful to all the pupils in it. His methods of instruction and discipline may not be equally adapted to the different minds and dispositions represented in the class, and his personal influence—not a small factor in school training—may not reach all pupils alike.—*Dr. E. E. White.*

to the inalienable rights of the individual. In school work, common sense must often be substituted for much that is called "sound pedagogics." Practical facts often conflict with professional theories.

Eighth, MONTHLY REPORTS.—At the close of each school month, a report showing the ATTENDANCE, DEPARTMENT, and SCHOLARSHIP of each pupil should be sent to the parents or guardians. The attendance for the month should be expressed in days and half days; the department should be marked EXCELLENT, GOOD, or BAD; the scholarship, HIGH, MEDIUM, or LOW. The Monthly Report should be simple, specific, and very brief. It should show only attendance, department, and scholarship. Special complaints in regard to a pupil's department should be made the subject of a special note, or better still, the subject of an interview.

Beginning with the first year or grade and ending with the twelfth year or high school, the following diagram represents the average attend-

ance through the school course. It shows that but fifty per cent. reach the sixth grade, thirty per cent. the eighth grade, and five per cent. complete the course.*



*Of the pupils enrolled in the lowest grade (first half of year) some 90 per cent. will reach the second grade; 85 per cent. the third grade; 75 per cent. the fourth grade; 60 per cent. the fifth grade; 50 per cent. the sixth grade; 40 per cent. the seventh grade; 30 per cent. the eighth grade; 15 per cent. the ninth grade (high school); 10 per cent. the tenth grade; 6 per cent. the eleventh grade; 5 per cent. the twelfth grade, and some 4 per cent. will complete the course.—*E. E. White.*

Every schoolmaster and schoolmistress in the Union may reflect, however humble or secluded be his station, that he has the opportunity of raising his school to an eminence. He may do his part towards elevating the standard of education, and sound a trumpet to the higher institutions to elevate theirs. He may reflect, as he enters the door of his schoolhouse, whether it be in the populous village or on the lonely prairie; whether on the bleak hillside, or under the shade of the grove; whether pitched on a mountain, or sprinkled by the surges of the ocean, that its naked walls may be decorated with simple ornaments, attractive to the eye, favorable to the taste, and instructive to the mind; the arrangements may be such as to secure healthful postures and exercise, thorough instruction and necessary variety, well attempered light, and the purest air that heaven affords. It may be the abode of harmony, happiness, and improvement. The best of friendships may be formed there; and the path which conducts to it, however stony or winding, may be associated in many a useful mind with recollections of childhood, and the loftiest conceptions of science, of man, and his Creator.—*Timothy Dwight.*

CHAPTER XIII.

THE TEACHER.

Teaching children is the greatest of all responsibilities. That upon which the teacher leaves his impress is the human soul, destined to an eternal association with the Infinite. The law of influence makes us like our surroundings. If events change men, much more does association change children. In the environments of a child's early life is found the beauty or the deformity of his old age. Character grows out of the images which cross it in early life. As the ideals of youth are the realities of old age, school associations play an important part in the formation of character. Few are fitted by nature and culture to mould the minds and hearts of others. The teacher is as much a special creation as the poet. Adaptation is nature.

BE HEROIC.—Action defines ; all else is cheap. If you do not feel the purpose of your life, you cannot expect success.* If you do not feel the responsibility of your place, you cannot fill it. If you think that success is a gift rather than a reward, pack your trunk, for your successor is looking for a place. If you hope to win, you must work. It is not manly to beg for there is always a vacancy. Success is the reward that nature offers to the worthy. It is not indiscrim-

*In order that a teacher should be thoroughly devoted to his work, he should be duly sensible of its importance; he should believe that the future character of a country depends upon the education of its children; he should be fully aware that in the soft and virgin soil of their souls he may plant the shoots of poison or sow the seeds of sweet-scented flowers or of life-giving fruit; he should realize the momentous thought that the little, prattling, thoughtless children by whom he is surrounded are to become the men of the approaching age. As a necessary consequence of all this, he should carefully look to the predilections of children. That child who is amusing himself with drawing triangles and circles may, under proper training, hereafter become another Pascal; that little dirty urchin who is plucking flowers by the wayside may become the poet or the orator of his age; that thoughtful, feeble body who is watching the effect of the steam as it blows and puffs from the tea-kettle, may become another Watt, destined to multiply the resources of our national wealth and power; that ruthless little savage who is leading mimic battles of the snow-storm may become (unless his evil tendencies are counteracted by education) another Napoleon, who may seize with a giant grasp the iron thunderbolt of death, and on the wreck of a people's hopes and happiness build himself up a terrible monument of guilt and greatness.—*T. Tate.*

inately handed out to the contented. The hope of the child-life in your charge should inspire you and dignify your work.

BE IDEAL.—The real is built upon the ideal. Children should be led to build grandly through the help of grand ideals. They should be led to plan for more than shelter, clothes, and bread. We are encouraged or discouraged by every contact with others. The petty book-worm dwarfs us; the generalizer enlarges us. The unconscious influence of the teacher cannot be measured. Imitation is so strong a trait in children that if the teacher stammer, some of the pupils will stammer; if he be an egotist, many of the pupils will become egotists. Plato was stoop-shouldered, and half his pupils walked bent. With children, teachers are more than ideals; they are realities. The personal influence of the teacher is more lasting than the text-book facts he teaches. He is more than books and authority; he is inspiration and life.

The success of a school depends upon the fit-

ness and purpose of the teacher. The teacher *is* the school. Pupils need leaders, not masters. The teacher, next to the mother, is responsible for the ideals of the young. He is a priest to childhood.* The care of several hundred children, or of one child, is a sacred trust—too sacred to be farmed out to the lowest bidder or to persons of limited experience. There is no moral relation between incompetency and *any* salary.

BE COMPETENT. — Intelligent results follow intelligent aims. Teachers should be larger than the text-books they use. Slavery to the text in use is poverty of knowledge. Scanty information makes a timid teacher. Pupils need the courage which is born of a conscious knowledge of the subject; they need the enthusiasm of a specialist. Mastery of the subject should characterize all the teacher does in the recitation. Little inspiration can be created in others by a mere follower. No imitator can develop into a

* An educator is a trainer whose function it is to draw forth persistently, habitually, and permanently the powers of a child; and education is the process which he employs for this purpose.—*Joseph Payne.*

real teacher. The value of the school depends upon the intellectual and moral power of the teacher; hence culture and purpose are essential.* Only those who think are competent to direct the thinking of others. Thought-power awakens thought-power. Purpose and feeling are organic. There is no more character in merely keeping school than there is moral worth in blind obedience.

Experience shows that good schools cannot be created by the edicts of superintendents. If the teachers have been trained for their work, the schools will be good; if they be untrained, the schools will be poor. The blind cannot lead the blind. The untrained cannot train others. It

* Unless the teacher takes care to furnish his own mind, he will soon find his present stock of knowledge, however liberal that may be, fading from his memory and becoming unavailable. To prevent this, and to keep along with every improvement, he should regularly pursue a course of study. I say regularly; for in order to accomplish anything really desirable, he must do something every day. By strict system in all his arrangements, he may find time to do it; and whenever I am told by a teacher that he can not find time to study, I always infer that there is a want of order in his arrangements, or a want of punctuality in the observance of that order. Human life is short; but most men still further abridge the period allotted to them, by a disregard of system.—*Page.*

should be clear to all that trained teachers are more necessary than trained doctors and lawyers. If training the minds of children does not require training, purpose, and character, what service for others does require it? We sometimes entrust the training of the minds of our children to untrained boys and girls, but we demand trained doctors to treat their bodies. We sometimes entrust the formation of the mental habits of our children to those who know little or nothing of the laws which govern the mind, but we demand qualified lawyers to look after our property—irreconcilable facts.

BE PERSISTENT.—The abstract merit of a cause is not sufficient to insure its success. Truth is mighty, but it prevails only when its advocates fight for it. Success is not a gift, but a reward. It never comes to us while we are asleep. Working reformers reform; all other reformers are mere fault-finders. The law of progress demands persistent effort. Things easily accomplished are usually of little value.

No one familiar with the history of civilization expects to substitute the millenium for the present condition without a struggle, nor even then. We should learn from history and from our experiences that there is no short road to permanent success. Little by little, step by step, we have grown to what we are.

HAVE FAITH.—Believe in the ten year old boy. Believe in his natural goodness and capacity. He is neither bad nor lazy. Believe that he is an inquirer, and treat him accordingly. Do not destroy what he has, but help him to add to it. Direction is more helpful than suppression. Obedience does not mean absorption. Schools are not penitentiaries. Teachers should not be masters, but sympathetic companions and guides. Teaching children is a head-and-heart work.

BE SINCERE.—Moral purpose is wanting in many who profess a high degree of theoretical morality. Such persons are unfit to have the care of children. The morality of books is a poor substitute for personal character. Is the

man who resorts to subterfuge—to lying, by concealment or otherwise,—fit to be trusted with the education of children? The world has more need of living example than of dead precept. Children measure teachers by their actions. Greatness is a concrete virtue.* Immortality is born of purpose. Do not discourage a manly boy of fifteen with a sickly lecture about his duty to God and man, but exhibit in your daily intercourse with him a moral purpose which evades formal expression. Healthy pupils are optimistic in their views of life, and should not be discouraged by the pessimism of inherited beliefs.

BE METHODICAL.—The methodical man is always at home—the unmethodical man, never. It is methodical drill that disciplines the mind and makes study pleasant and profitable. Proper

* In all your intercourse with your fellow-teachers, be careful to use the “words of truth and soberness.” In stating your experience, never allow your fancy to embellish your facts. Of this there is great danger. The young are sometimes tempted to tell a good story; but a deviation from the truth—always perilous and always wrong—may be peculiarly disastrous here. Experience overstated, may egregiously mislead the unwary inquirer after truth. Never over-color the picture; it is better to err on the other side.—*Page.*

methods create an appetite for knowledge, develop independence of character, and incline the pupil to depend upon himself. It is method, energy, and persistency that win. It is how an act is performed, rather than what is performed, that educates. Mechanical work soon becomes monotonous, even to children.

BE IMPARTIAL.—Children detect any form of favoritism. If you want the good will of all, treat all alike. Treat all pupils with equal sincerity, justice, and singleness of purpose. At the school-yard gate all distinctions, real or imaginary, should disappear. Teachers who discriminate for like offenses are too cowardly to have places in our schools.

BE EARNEST.—In all the relations of life success bestows its crown upon purpose and earnestness. If you expect interest on the part of your pupils, you must manifest interest yourself. Activity is contagious. Moral character, in the certificate, means action. It means sympathy with the school-life of your pupils. The real

teacher is an enthusiast. Teach that "Life is real, life is earnest," by the earnestness of your own example.*

BE HONEST.—The real teacher is a true man or a true woman. Popularity purchased at a sacrifice of principle is always short-lived. The real teacher is broader than an "ism," and better than a petty politician. He represents the manward side of life. He should be free enough from prejudice to accept the truth from any source. The successful teacher believes, feels, and acts.

I am glad that the drift in education is toward investigation. Inspiration is more nearly related to inquiry than to belief. We think, that we may feel—that we may act—that we may

* But in any case really vital results can be secured only in the degree in which the teacher throws his whole life into his work. It is, above all, through the contagion of his own personal enthusiasm that interest is to be awakened on the part of his pupils; just as it is only through the freshness and validity of his own knowledge of the subject that his pupils can be led to apprehend its fundamental features, and to assimilate the proper method by which they can hope to become independent inquirers. A working teacher will always have working pupils; and this the more if they are not overwhelmed with text-books rendered wholly unmanageable for them by sheer excess of details.—*Bryant's Psychology.*

live. "As a man thinketh in his heart, so is he." We need not only intellect, but character. Intellect only sees; the heart feels. The teacher is the ideal. In school the pupil forms his first impressions of the world outside of home; hence the teacher should be tender, trusty, and true. His manner should express independence, patience, and sympathy. Independence is inspiring, patience heroic, and sympathy divine.

The true teacher is an ideal man or woman. He stands for culture, progress, and humanity. He acknowledges the responsibility of his profession; he really lives, not merely exists by sufferance. But every profession has its dead members; every institution has its contented believers; every vocation its dodgers and apologizers. The teacher's profession is not an exception.

The essential element of social culture is found in moral character. Without this latter, every graceful device of behavior remains worthless, and can never attain that purity of humility and dignity which are possible to it in its unity with morality.

* * * * *

The consideration of the culture of character leads to the subject of conscience. This is the comparison which the moral agent makes between himself as he is and his ideal self. He compares himself, in his past or future, with his nature, and judges himself accordingly as good or bad. This independence which belongs to the ethical judgment is the true soul of all morality, the negation of all self-illusion and of all deception through another. The educational maxim is: Be conscientious. Depend in your final decision entirely on your conception of what is right.—*Rosenkranz*.

CHAPTER XIV.

MORAL EDUCATION.

Intellectual training alone can never be relied upon as a reformatory power. Bacon, Byron, and Poe possessed genius, but they lacked character. John Stuart Mill was the most eminent exponent of intellectualism of his day, but he worshipped only music, painting, poetry, and his wife. Daniel Webster was an intellectual giant; but he was also almost a sot. Many other illustrations might be added to show that a mixture of the spelling book and the rule of three will not make a moral man. Intellectual education is only a preparation for moral education, which aims to teach man his duty to his fellow man and to his God. The child becomes a man through the culture of the intellect, but *is* a man through the

culture of the heart. Feeling outranks intellectuality. Teaching which does not develop feeling is almost worthless. The test of methods of instruction, intellectual and moral, is the kind of character produced. Man needs character as well as culture.

Mere intellectuality does not equip one for the life that now is, nor for the life to come. "Character," says Emerson, "repudiates intellect, yet excites it." Great thoughts are born in the heart. Man is a being of more than intellect; he has appetites, passions, and an emotional nature. Intellectuality does not primarily appeal to the moral nature; moral education reaches down and seizes the motive power in human action. Moral instruction appeals to the primitive facts of moral consciousness, independently of all formal theologies. Theology is of the intellect; Christianity is of the heart. There was no technical theology in the preaching of Jesus. Moral instruction should clinch moral habits; it should make clear to the child the universal laws upon

which moral conduct is based.* Moral instruction means training the child in habits which yield conviction and character. The function of the school is not merely to store the memory, but to train the soul of the child. The child goes to school to grow better, wiser, wider, and deeper; to be educated, rather than merely instructed in text-books.

* Education is the preparation for complete living.—*Spencer*.

The purpose of education is to give to the body and to the soul, all the beauty and all the perfection of which they are capable.—*Plato*.

We must accept nothing from precautionary maxims beyond the point at which practice has changed them into firm habits.—*Locke*.

Intellectual education is surely the best of preparations for moral education. Whatever is done for developing the intelligence is far from being lost, so far as the culture of the sentiments, of the moral consciousness, and of the will is concerned. In a well-organized intelligence, all whose faculties have received the education appropriate to their destination, the moral qualities of the character germinate spontaneously. The man merely instructed is sometimes a bad man; but we doubt whether the same thing is true of a man well educated intellectually. A tempered imagination, a powerful attention, and a sound judgment, are reliable barriers which vouch for the ardor of the passions and prevent the errors of conduct.

It is none the less true that intellectual education is not sufficient, but that the other faculties also demand a special culture. The man of feeling has no less value than the man of intellect. We are not destined merely to know and comprehend, but are also made to feel and love. Moral education is, then, to be distinguished from intellectual education, and its first purpose ought to be the culture of the feelings.—*Compayré*.

IDEA OF RIGHT.—The moral nature in man concerns itself about the right and the wrong in human conduct.* Ideas of right and wrong are intuitive. All sorts of people have some idea that there is a right, and that there is a wrong. All men admit that every man should have what is due to him, and that every one should do unto others as he would have others do unto him.

* The end of study is not knowledge, but conduct.—*Aristotle.*

To the intellectual culture which forms the mind there should be the moral courage which forms the heart.—*M. Gerard.*

Instruction is but the least part of education. What a father should desire for his son is virtue before everything else; knowledge occupies but the second place.—*Locke.*

The three ends of education are character, culture, and learning, and it is clear that the first of these ends should never be sacrificed as a means of securing the other two.—*Dr. Woolsey.*

The education of the heart is confessedly too much neglected in all our schools. It has often been remarked that "knowledge is power," and as truly that "knowledge without principle to regulate it may make a man a powerful villain!" It is all-important that our youth should early receive such moral training as shall make it safe to give them knowledge. Very much of this work must devolve upon the teacher; or rather, when he undertakes to teach, he assumes the responsibility of doing or of neglecting this work.

The precept of the teacher may do much toward teaching the child his duty to God, to himself, and to his fellow-beings. But it is not mainly by precept that this is to be done. Sermons and homilies are but little heeded in the school-room; and unless the teacher has some other mode of reaching the feelings and the conscience, he may despair of being successful in moral training.—*Page.*

These two principles embrace the whole moral law, and do not depend upon any particular form of religious belief, nor upon the observance of any formal ceremonies for their recognition or interpretation. They are self-evident truths; they cover the whole ground of moral instruction; they teach that man should be just, benevolent, merciful, and forgiving.

THE SCHOOL A MORAL INSTITUTION. — The school is a moral influence. Most children are naturally good, notwithstanding the dogma of total depravity. No child exhibits so deep depravity as the person who declares humanity a failure. The teacher who believes that children are totally depraved is unfit, from a moral standpoint, to have charge of a school. No amount of intellectual culture can apologize for the depravity of a heart filled with such a belief. The progress of civilization shows that humanity is not a failure; educational, religious, and charitable institutions deny the doctrine of the total depravity of man. The converse of pessimism is

true. Man is the greatest of successes, and the public free school is the whitest flower of civilization. Parties and creed religion may fail, but patriotism and Christianity can never fail. We are here not only to educate ourselves, but to insist upon the education of all that are here and of all that may come here. No other theory of life has meaning. "The soul stipulates no private good." The public school does not aim to teach morality through the use of ceremonies, nor through the recitation of abstract, moral precepts. It has a larger service for humanity than is found in the formal observances of rites and ceremonies. The world is fast learning that "Life is practice, not theory."

The public school is neither irreligious nor godless because it does not require, in its daily programme of exercises, some of the usual, formal doctrines of the one hundred and fifty different forms of doctrinal beliefs. Instruction in the public school is moral, because it aims to develop moral character independently of hereditary be-

liefs and prejudices. Its freedom from external authority is the highest possible evidence of its moral worth.

SCHOOL STUDIES MORAL INFLUENCES. — All school studies have a value as knowledge; they have a higher value as a discipline. The school is only a means to an end, and that end is character rather than culture. As the public grammar school educates more than ninety per cent. of our population, the character of the instruction is of the highest importance. The studies pursued in school have a moral influence upon children. The study of history has a very high moral value. It places before the child the lives of heroes and heroines, good and bad, thus helping him to create ideals. It gives to the teacher his greatest opportunity to impress upon the pupil the cost and value of civil and religious liberty, the beauty of patriotism, and the duties of citizenship.

The study of geography gives to the pupil an opportunity to see the beautiful in landscapes,

mountains, oceans, lakes, and rivers. It gives to the imagination the widest range in which to make the beautiful in nature still more beautiful. It carries the child out of reality into ideality—out of the finite into the infinite. Geography appeals directly to the conceptual and the imaginative powers of the mind; it cultivates both the reasoning and the æsthetic faculties.

The study of mathematics trains the child to concise and direct statements of principles and conclusions; hence it inclines him to a correct, economical, and logical use of language. Arithmetic, especially, lacks the continuity of thought found in the other elementary studies; hence it cultivates a quick and independent judgment. It deals with a greater number of particular and general notions than the other studies; hence it furnishes a greater number of general truths.

The study of the sciences cultivates both the judgment and the reason, in accuracy and truthfulness. Scientific men are apt to be more accurate in their statements than other men. The

study of the sciences cultivates intellectual honesty, without which moral character is impossible. The distinguishing characteristic of scientific men is an unquenchable thirst for truth—for exact truth.

The study of literature wisely selected has a direct moral influence upon the child. In literature we find the two spirits, angels and demons, which accompany us through life. By association with ideal characters in literature, the child grows to love the true, the beautiful, and the good, and to hate the false, the ugly, and the bad. In short, the value of the school depends more upon the ideals it creates than upon the facts it teaches.

SCHOOL EXERCISES MORAL AGENCIES.—The school exercises, if properly conducted, tend toward the formation of moral habits. The discipline of the school, if good, has a direct moral influence upon the character of the child. Sound methods of instruction lead to the formation of good habits. Promptness, politeness, deference,

and exactness should enter into all school exercises. Virtue can be taught without teaching particular formulas or beliefs. Moral habits deal with the relations of man to man—with the obligations and the duties of every day life.

The school, next to the home, offers special occasions for training the child in those habits which develop moral character. The daily exercises do much toward changing him from a natural to a spiritual being. They train him in habits of punctuality, industry, order, and obedience. The recitation of lessons gives the teacher an opportunity to impress upon the pupil the value of honesty—to teach him that he should not expect nor receive help from his classmates—that “The merit of a performance is in the soul of the performer.”

EXAMPLE TEACHES. — The character of the teacher is everything to the child. The teacher is the ideal. A large-souled man is a grand contribution to humanity, wherever he is found; and where such a man is placed at the head of a

school, he becomes the most influential person in the district. Children naturally love the liberal, and hate the petty. Moral instruction does not mean set lectures on ethical subjects, so much as moral example on the part of the teacher. Abstract moral precepts have little or no meaning to children. Actions speak with more force than precepts; works with more force than words. There is nothing cheaper than the cant of a professional moral theorist. But the moral fanatic has his place. In seeing but one phase of a subject, and unduly exaggerating his *one virtue*, he helps others to see that most questions are many sided.

ASSOCIATION EDUCATES.—Associates are the great teachers. Education is more a matter of association with men and nature than with teachers and books. Emerson says: "We send our children to the schools to be taught by the teachers, but the teachers are really educated by the pupils." Character, the real end of education, is more the result of association than of all

other influences combined. In fact, a man is known by his associations—by the company he keeps. Only in a moral atmosphere is it possible for the child to grow into a moral character; hence the need of constant vigilance on the part of parents and teachers.

INDUSTRY PROMOTES MORALITY.—A more industrious and exacting home-life than is found in a large majority of American families is an urgent need. Most children do not receive in the home the training and discipline which result in the early formation of habits of industry. Children should be trained at an early age to do for themselves, and to help in the family. There is an intellectual and moral training in *doing*, not found in theoretical ethics. There is neither greatness nor goodness without labor. Patience, perseverance, and moral purpose are born of industry. Every home furnishes ample opportunities for training children in habits of industry, obedience, and politeness.

EDUCATION A GROWTH.—Moral education, like

intellectual education, is the result of training; it is a growth, not a gift. God gives life and opportunity only. Man must grow into conditions; he can never be more than the sum of his own efforts. Character is the outgrowth of feeling, conviction, and action. The mechanical recitation of moral maxims or of church creeds and the automatic observance of formal ceremonies do not reach the heart. Our need is not more formal religion, but more Christianity; not more preaching, but more teaching. It is often a long distance between theoretical religion and practical Christianity. It is the daily observation of this fact that continues to embarrass and discourage the practical man of the world.

CHARACTER.—Conscience always approves the right, and condemns the wrong. God did not create man without an internal and ever-present guide. This ever-present mentor, conscience, should always be obeyed. The aim of the teacher should be to lead the pupil to act uniformly in accordance with the promptings of his

conscience. The highest motive in life is the desire to do right because it is right, not because some outside authority has commanded this or that. Duty is the only authority; it is always right. It involves not only the desire for the approval of one's own conscience, but the desire for the approval of God and man. Right and wrong cannot be determined by creeds and theologies, but by the mentor within. Non-sectarian moral instruction develops, without cant and without prejudice, moral ideas and tends to the formation of virtues and manly habits. It is possible to speak with reverence and authority, yet to lack the moral courage which constitutes the value of a life. The child's greatest need is not mere book-learning, but moral character. Moral courage is not only the child's greatest need; it is the state's greatest need, also.

The realization of a moral character is the highest possible attainment. A truly moral man is one whose moral purpose has grown into habits. Moral instruction rests wholly upon educa-

tional grounds; the religious bias or prejudice of the instructor has nothing whatever to do with it. It rests upon higher and firmer principles than a mere belief in some formal doctrines. Moral actions do not depend upon the acceptance of the systems of theologians. Goodness and greatness are concrete virtues.

“The home is the garden of moral training.” Mothers are the great formative influences in the lives of children. The home, more than all other influences, educates the child under the age of ten years. Beside the influence of the home, all other influences are timid and ineffectual. If children are wisely governed during their first ten years, little risk attends their future. School discipline can never make good the deficiencies of the home.

The public school is supported by people of all political parties and of all phases of religious belief. As there is no state religion in the United States, there should be no creed or formal religion in the state schools. The moral instructor

should teach morality, but not religion. He should deliver to his pupils a clear understanding of what is right and what is wrong, but here his duty ceases. It is not his business to formulate articles of belief. As an individual he may subscribe to any doctrine, but he has no moral right to teach it to others. It is the business of religion and philosophy to formulate beliefs and to discuss theories, but the teacher is never called upon to choose between metaphysical asseverations. The grounds of moral obligation are not topics for the recitation-room.

But there is ample ground for all religions and all parties to stand upon. All good men, of whatever religious belief, accept the great, fundamental moral truths. These should be delivered to the pupils in the best pedagogic manner, and illustrated in the daily life of the teacher. The great body of men in all civilized countries believe in the existence of God and in the immortality of the soul, but no two religious sects agree upon the details of formal beliefs. The great

majority of men believe in future rewards and punishments, but differ widely in regard to the character of the reward or punishment. Most men believe that man is personally responsible to God and man, but perhaps no two would fully agree in regard to the degree of the responsibility. From these facts it follows that no form of sectarianism can ever be introduced into the public school without endangering the free school system itself. The Great Teacher knew no creed, but

“With reverent feet the earth He trod,
Nor banished nature from His plan,
But studied still with deep research
To build the Universal Church,
Lofty as is the love of God,
And ample as the wants of man.”

QUESTIONS ON THE TEXT.

CHAPTER I.

SENSATION—PERCEPTION.

1. Give two reasons for studying psychology.
2. What is sensation?
3. In how many ways do the senses relate us to the external world? Give illustrations.
4. In what way do sensations become elements of knowledge?
5. What is perception?
6. What is a percept?
7. How are percepts formed?
8. What is the most important factor in perception?
9. What are the elements of knowledge?
10. What is knowledge?
11. What is meant by the three different stages of consciousness?
12. Are the different modes of the mind separable from one another?

CHAPTER II.

MEMORY IN EDUCATION.

1. Define memory.
2. Upon what does retention chiefly depend?
3. In what particular respect does the re-called image differ from the sense-percept?
4. In what way is memory related to perception?
5. Name five methods of improving the memory.
6. Why are reviews necessary?
7. Explain why some teachers should review oftener than others.

8. Which object is the more distinct when recalled, the one seen many times and recalled once, or the one seen once and recalled many times? Give reasons and illustrations.

CHAPTER III.

IMAGINATION IN EDUCATION.

1. In what respect does imagination differ from memory?
2. In what special way does imagination aid in developing character?
3. What is the difference between reproductive and creative imagination?
4. What is the boundary of the imagination?
5. Why is it that the ideals created by imagination are usually beyond the age in which they are created?
6. What is the moral relation between the ideal and the real?

CHAPTER IV.

ASSOCIATION IN EDUCATION.

1. Name, define, and illustrate the laws of association.
2. Which one of the laws of association is most used in teaching? Why?
3. Why do ideas logically associated together tend to recall each other? Give three illustrations.
4. Why is contrast a means of education? Give three illustrations of the value of contrast.
5. Why do ideas logically associated together tend to recall each other? Illustrate.

CHAPTER V.

ATTENTION IN EDUCATION.

1. Define attention.
2. Define voluntary attention and give three illustrations.
3. Define involuntary attention and give three illustrations.
4. Upon what does perception depend?
5. Upon what does retention depend?
6. Upon what does feeling chiefly depend?
7. Why does conscious sensation depend upon attention? Give three illustrations.
8. Why does interest depend upon attention?
9. Why should pupils sit still or stand still while reciting?
10. Why should a teacher stand where he can command the attention of each pupil of a class?
11. Why do some pupils perceive more perfectly than others?
12. Can one in a minimum degree attend to more than one thing at a time? Illustrate.
13. Give an illustration of the value of enthusiasm in securing and retaining attention.
14. Why is earnestness upon the part of teachers necessary to secure and retain the attention of pupils?
15. Which method will secure the better attention of a class, asking a question, then calling on a pupil, or calling on a pupil then asking a question? Give reason for your answer.

CHAPTER VI.

CONCEPTION.

1. What is conception?
2. What is the distinguishing difference between a percept and a concept?

3. How do we form general notions or concepts?
4. What three mental acts in every act of conception?
5. Why is the concept the logical subject of thought?
6. What kind of concepts have children when they first start to school?
7. What is the difference between concrete and abstract concepts? Give three of each kind.

CHAPTER VII.

JUDGMENT—REASON.

1. What is a judgment?
2. What three elements enter into every judgment?
3. What is the difference between an idea and a proposition?
4. What is a syllogism? Give an illustration.
5. What is inductive reasoning? Give an illustration.
6. What is deductive reasoning? Give an illustration.
7. Why are two concepts required to form a judgment? Illustrate.
8. What is thinking?

CHAPTER VIII.

HABIT IN EDUCATION.

1. How is habit acquired?
2. Why is a repeated act easier to perform than an unaccustomed act? Give two illustrations; one mental, one physical.
3. Upon what two facts does the strength of a habit depend?
4. In what sense does habit dull the faculties?
5. What kind of acts can best be done at the same time others are being done, new or habitual acts? Illustrate.
6. Is intellectual growth possible through the continued repetition of the same mental act? Give reasons for your answer.

7. Show by two illustrations that habit saves time and energy.
8. Why is it easier to form a new habit than it is to dislodge an old one?
9. Do habits ever prevent carrying out volitions? Illustrate.
10. What is the primary end of education?

CHAPTERS IX & X.

METHOD IN EDUCATION.

1. Why may a teacher be a hindrance or a help?
2. Why is a teacher who has become a talking machine a failure?
3. Why should excessive details be avoided in teaching?
4. To what three principal causes is school waste usually due?
5. What is the only true measure of a knowledge of English grammar?
6. Why should pupils in the grammar grades read complete selections of standard literature?
7. What is your opinion of the traditional fourth and fifth readers?
8. State briefly your opinion of the traditional "Complete Arithmetics."

CHAPTER XI.

THE RECITATION.

1. Into how many parts may every recitation be divided?
2. Why should definitions and principles be illustrated by the pupils?
3. Name three objections to concert recitation.
4. State three reasons why the topic method of recitation is preferable.
5. Why may the recitation be properly called the heart of the school day?

CHAPTER XII.

THE SCHOOL.

1. Upon what does the value of a school chiefly depend?
2. Why should a teacher have a program of exercises?
3. State your views about fixed rules.
4. State your views in regard to punishment.
5. When should a pupil be promoted?

CHAPTER XIII.

THE TEACHER.

1. Why is teaching school the greatest of all responsibilities?
2. Upon whom does the success of a school chiefly depend?
3. Why should a teacher be a manly man?
4. Why should a teacher be thoroughly competent?
5. Why does conscious incompetency make a teacher timid?

CHAPTER XIV.

MORAL EDUCATION.

1. Why is intellectual education alone insufficient?
2. Why is a well conducted school a strictly moral institution?
3. In what way may the study of history teach moral lessons?
4. In what way may the study of geography teach moral lessons?
5. In what way does the study of science teach moral lessons?
6. In what way does the study of good literature promote the growth of moral character?

CHAPTER XV.

THE IDEAL LIFE.*

Wordsworth said :

“Earthly fame
Is fortune’s frail dependent; yet there lives
A Judge, who, as man claims by merit, gives :
To whose all-pondering mind a noble aim,
Faithfully kept, is as a noble deed;
In whose pure sight all virtue doth succeed.”

A man is described by his ambition. If his ambition is the accumulation of wealth, he is a slave of selfishness ; if it is fame, he will stoop to please ; if pleasure, he lives for the transient. To live for wealth, fame, or pleasure, is to live for the present. With Bishop Spalding feel that

“To live for common ends is to be common ;
The highest faith still makes the highest man ;
For we grow like the things our souls believe,
And rise or sink as we aim high or low.”

Ideals are to realities as cause to effect, hence

*Commencement Address, State Normal School, Warrensburg, Mo., June 9, 1891.

the progress of the world depends upon the ideals of the masses. Ideals have saved the race from despondency and suicide. The ideal is the ever movable star that kindly advances as we approach it; it is the unattainable which has attained the present; it is that upon which the intellectual and moral condition of the future depends. What a cold and uninviting world this would be without ideals! The home would be a cheerless dungeon, and the grave the end. A life of isolated, realizable facts would be almost pulseless. Without ideals and labor, life would be an aimless dream.

Intellect guides the world. It gives us higher ideals and nobler aims. It sees what will be, and thus uplifts the beholder. It opens the door of the soul and helps one to feel that "Life is real, life is earnest." It enables one to shine by his own light. Only through education have the masses advanced to a freer, higher, and better life. Culture stands for our best things. It vitalizes the intellectual and moral nature of

man. The power to think and to enjoy the thoughts of others transforms poverty into wealth, cottages into palaces, and the humble into kings. Thinking makes the slave less a slave, the saint more a saint; it makes wealth more serviceable, poverty more bearable; it sweetens sorrow, decreases misfortune, and defers emergencies. Faraday, Kepler, Franklin, Fulton, and Edison were the sons of poor parents. Lincoln was born in a cabin, and Christ in a manger. Intellectuality does not need the influence of gold to give it power.

In a large measure, ideals depend upon the power to think. Three hundred years ago but few could read or write. At that time those in authority in church and state did not advocate the education of the masses. Civilization is a growth; Christianity is a growth. Adam and Eve once represented the innocent and ignorant poverty of the race, out of which has been evolved the inquiring man of today. In the beginning, man was a naked barbarian—naked in body—

naked in brain—naked in heart—naked in soul. The power to think relates man to the world around him. Thinking enables him to sift the true from the false, the real from the formal. Only through thinking can man find the truth or apply it.

Nobleness of life depends, not upon our calling, but upon spirit and purpose. It is as honorable to teach school as to preach the gospel; to plow corn as to practice law. The inspiration of a high purpose, the beauty of a sincere life, are within the reach of all. The universe belongs to those who can appropriate it, rather than to those who can buy it. Milton was blind, but he saw more beautiful visions than most of us ever see. Beethoven was deaf, but he heard more beautiful music than most of us ever hear. Noble thoughts and noble deeds give a meaning to life wholly unknown to those who worship the material. No king was ever so happy as Columbus, Newton, Emerson, Edison. Real life is a search after true greatness. Castles, royalty,

and regalia are surface exhibitions. The ideals which lift us to higher plains of thought and action are not found in the markets.

Conditions are within us, not in our surroundings. Happiness comes from within—it is born of the heart. Man, if unhappy, is the discordant element. All nature invites him into harmonious relations, not only with God, but with his fellow man. The quite prevalent idea that we are fated to three score and ten years of unhappiness, no matter how honestly and diligently we strive to avoid it, is repugnant to our natural sense of justice. As beauty of features is the outward expression of a noble purpose, so happiness is the inner expression of a pure life.

The heart is but an atom, but the universe of matter cannot fill it. Our associates are spirits, not things. Excellence, whether intellectual or moral, can be attained only by keeping before you the true and the beautiful. By keeping high ideals before you, undiscovered powers are awakened into life, and thus you often realize more

than you seek. Great poets have discovered new powers of description by contemplating one of nature's great scenes. Live in company with the ideals which love creates—love is the uplifting and inspiring force in humanity.

The need is not more of us but a better quality of us. China illustrates the condition of a people wedded to material ideals. In a population of three hundred millions there is not one notably spiritual man or woman. Population does not measure the value of a country. Lincoln, not Chicago, speaks for Illinois; Gladstone, not London, for England. One Washington is worth ten thousand average men. "The true test of civilization is not the census, nor the size of the cities, nor the crops—but the kind of men the country turns out," wrote the sage of Concord, and the poet priest of Illinois has truthfully said that :

"A people is but the attempt of many
To rise to the completer life of one;
And those who live as models for the masses
Are singly of more value than them all."

Every man is a specialist and needs education. Every one should be a success in his own place, for every one born into the world is in some respects superior to all others. God offers every man a chance by making no duplicates. There are no favored few. God never excuses a man who violates a law. The law of compensation applies to all alike. No man was born for a parasite or a Lord. The Prince of Wales should earn his own living by the sweat of his brow. The idler, rich or poor, is a beggar. Emerson said, "No one is a whole man till he knows how to earn a blameless livelihood." Carlyle said, "Whoever does not work, begs or steals." Ruskin said, "If you want knowledge, you must toil for it; if food, you must toil for it; and if pleasure, you must toil for it. Toil is the law."

I have faith in the laborer, but not in the idler. Inspiration and manhood come from purpose and industry. All great men have been working men. Shakespeare was a theatre manager, Emerson a school teacher, Lincoln a farmer. Na-

ture does not give anything for the asking, merely; without purpose and effort there can be no advance, moral or intellectual. Great things never happen, they are always results. Expect not the miraculous, but the natural. Miraculous creations would not only subvert the natural order of development, but would destroy man's inspiration and responsibility.

When a man ceases to struggle for higher realities, he is dead, not only to himself, but to the world. When he ceases to climb, he begins to fall. Rest is unknown in the intellectual and moral world. Ceaseless efforts have always characterized the lives of great men. Perseverance is more valuable than talent. Results are not gifts, but rewards. No one can realize or accomplish anything by merely longing, hoping, and dreaming. Ninety-nine in one hundred who are born "with silver spoons in their mouths" and reared in idleness, live without friends and die without mourners. We are not entitled to rank, fame, or wealth by virtue of birth.

Ideals are revolutionizing the world. But I would not have you infer that the millenium of the dreamer is at hand; it is not, and never will be. 'The millenium is the dream of the unthinking. If it were possible to realize it, humanity would soon be a mass of ignorant degradation. A ceaseless struggle, here and hereafter, is man's only hope of growth and happiness. "A man's task is his life preserver." The struggle for higher realities will ever remain. Today is satisfactory only to the extent that it is better than yesterday. Evolution is doing its work; it has given us a new philosophy, a new biology, a new astronomy, and will yet give us a new theology.

Teachers, be yourselves, do not imitate others. Live within the limits described by the wisest of all men :

"This above all: to thine own self be true,
And it must follow, as the night the day,
Thou canst not then be false to any man."

Say and write what you think. Sincerity is the first step toward greatness. Whatever your faith, let it be organic. You have no moral right

to imprison your souls in the dead beliefs of the dead past. Too much of life is a commodity, a convenience, and a habit. Individual thinking is the basis of moral conceptions. Reason is the only safe guide in all matters, religious, political, and economical. Individual responsibility demands individual thinking. If man is not free to think, he is but a machine; if he is not free to choose, he is not responsible.

Be true to your highest convictions. The intimations of your own souls are a safer guide than any outside authority. There is nothing inspiring in the lives of those who are drilled to step to the music of others. Permit no authority, church or state, to curtail the privilege of independent thinking. We are living in a time when conviction is at a premium. The habit of belief is not so strong as it once was; the penalty for thinking is not so severe. With the increase of general intelligence, we are less inclined to believe without investigation. Accepted dogmas are questioned, and the man with a new idea

is certain to find an audience. The iconoclast is received with open arms. The demand of the age is truth, not tradition.

"It is better to rest beneath the sod
Than to be true to Church and State,
While doubly false to God."

Live, not merely exist. Contentment is unworthiness. A life of routine, a condition of fossilized habit, is not worthy the age in which you live. Moral growth demands intellectual freedom. Without the inspiration of personal conviction, the soul may become as dead as the Dead Sea. Self-respect demands that you throw off, if necessary, the captivity of early life, and seek the eternal significance of opportunity. You need more than your fathers needed. You need more than dead knowledge. Live in the breathing present. Growth often demands an absolute reversal of beliefs and policies. Dryden said:

"By education most have been misled,
So we believe because we were so bred:
The priest continues what the nurse began,
And thus the boy imposes on the man."

Doing often means undoing. Independent thinking has given us the present, and will forever continue to make tomorrow better than today. The right to think is inalienable, or man is a machine; thought is life, or the human soul is a thing.

Be courageous. Not one man in one thousand has ever had the courage to rise above the teachings and prejudices of his party or church and live in harmony with the suggestions of his own soul. What is often called consistency is only stagnation. Men who grow cannot be consistent in the sense that they do not change their opinions; growth is change, or modification at least. To grow often means to outgrow. The only way to maintain your present intellectual and moral condition is to strive to attain to a higher one. This law of growth, through striving for higher ideals, is as universal in its application as the law of gravitation. That man should always struggle for higher realities, that he might never become perfect, God made him capable of infinite development throughout infinite time.

Were this not so, humanity would soon return to a state of ignorant barbarism, similar to the one which characterized the age of our first parents.

It is legal to inherit an estate, but not complimentary to inherit a belief. Intellectual servitude neither honors God nor pleases man. There is but little in a life that merely exists, believes, and forgets. Thinking within a fixed circle, however ancient, cannot satisfy a growing soul. Growth depends upon the freedom to investigate—upon the courage of conviction. To every sincere soul, truth is more valuable than favor or the applause of the timid. The first thing man requires of man is man. We may excuse many sins in an honest man, but all the world hates a hypocrite. Conviction is a growth, belief is usually an inheritance; conviction is organic, belief, automatic. One is plus, the other minus. Live in the affirmative—negativeness is always a doubtful virtue. Do not preach, but teach. One living example is worth a thousand dead precepts. Breathing men govern the world.

Be not afraid. The courage of conviction has given the masses their opportunity; it has changed monarchies into republics, kings into subjects, and slaves into free men. Young man, young woman, you have no right to limit your search for truth to the teachings of your family, church, or party. An "ism" and a party are conditions of a day. Believe with the gifted Tennyson, that

"Our little systems have their day,
They have their day and cease to be:
They are but broken lights of Thee,
And Thou, O Lord, art more than they."

Permit no man, priest or prophet, to come between your soul and God. The right of conviction is a sacred personal right, and man should respect it.

Avoid extremes. An abject and cowardly deference to authority and absolute independence of all authority are the two extremes which all should guard against. Too much dependence upon the *ipse dixit* of another makes one merely the recipient of pre-arranged ideas.

On the other hand, too much self-reliance renders the influence of a superior mind powerless. Do not read to believe nor to disbelieve, but to investigate for yourself. Every one's convictions should be the outgrowth of personal thinking.

Purpose is essential to character ; the dreamer is a commodity. Be more than straw on the river of time—be strong in purpose. Great deeds have usually been the work of individuals, and usually in opposition to law. Great leaders have always been self-directed. Behind every great success may be found a strong personality. The great achievements of the world are due to the progressive spirit of the few. The masses have always opposed new ideas, new ideals, and new realities. Be a hero. The hero is ideal—the inspiration of his age, the leader of men, the founder of institutions. He is greater than human creeds, ceremonial rites, and traditional beliefs.

Look not to the self-constituted leaders. Look

within for suggestions; the soul is always true to itself. The professionals are timid and selfish. Every man born into the world must face the problem of life for himself. It is this individual responsibility that makes life worth the living. Do not hope to live a life of usefulness and happiness by merely existing, but by serving others. It is not years that measure the value of a life, but inspiration and motive. No one should care for life merely to live, but for the opportunity that life offers. With Bailey feel:

“We live in deeds, not years; in thoughts, not breaths;

In feeling, not in figures on a dial.

We should count time by heart throbs. He most lives

Who thinks most—feels the noblest—acts the best.”

Do good now. Moral purpose is measured by action, rather than by mere belief. Never rate a man by his professions, but by his actions. A profession of moral purpose not emphasized by action is mere cant—the currency of hypocrites. Action—action only—can fill words with meaning. Doing is the most persuasive evidence of

moral purpose. Feel reality in duty done; you cannot feel it in duty merely professed. If you cannot accomplish a great work, content yourself by doing whatever you can. In the main, life is made up of little things. Greatness is purpose rather than accomplishment.

A strong man sees possible results; a feeble man sees only what is. What you need is the courage to be yourselves—to be true, honest, and brave. To think, to act, is to live. Make your spiritual natures pay dividends. Automatic obedience to authority can never inspire the soul with the full meaning of life. The merely mechanical can never inspire. “He who would inspire and lead his race must be defended from traveling with the souls of other men, from living, breathing, reading, and writing in the daily time-worn yoke of their opinions,” said Emerson. The man who discerns a new truth, destroys a falsehood, or disturbs a prejudice, is a benefactor of the race.

The struggle for the ideal is the struggle of

all time. Life is a progression—an infinite series of successes and defeats. Nothing is settled save the man who refuses to think. No array of facts can inspire us, but what we are. The truly beautiful in man is not his possessions but his purpose. Greatness depends upon reality; it is what we feel but cannot express. No man is great who is not morally honest. The time-server in education, politics, or religion, however much cultured and praised, is neither great nor useful. The quality of a man's character depends upon the practical principles that govern his daily life. We inherit nature, but we acquire character.

We are never greater nor better than our aims. A noble aim means more than self—it means unselfish service to humanity; it means more than merely feeding the hungry; it means an effort to make hunger impossible; it means more than educating the ignorant; it means an effort to make ignorance impossible; it means more than gifts and prayers; it means purpose and labor.

Man must lose himself in unselfish service for others before he can feel the significance of his opportunity.

Our mission is to labor and to wait. The future is full of hope. I believe that education will yet show that all life is related—that the beggar in the cabin is akin to the man in the palace. The problem of man's existence is being solved. Man must advance; he could not go backward if he would. The continued growth of civilization is assured by the progress of the past. Five hundred years ago the average man everywhere lived in utter darkness and degradation. The average man today, in Europe and America, has comforts, luxuries, and opportunities once beyond the reach of kings and queens.

The way to happiness, usefulness, and greatness has been beautifully described by Christ himself. The essence of the Christian religion is love—unselfish love. “THOU SHALT LOVE THE LORD THY GOD WITH ALL THY HEART, AND WITH ALL THY SOUL, AND WITH ALL THY MIND. AND

THOU SHALT LOVE THY NEIGHBOR AS THYSELF." This is Christ's creed, you need no other. No abstractions, no supernatural conditions, no ritualism, no pomp, no display; but love to God and love to man. Christ is the ideal—the moral and intellectual genius of the creative power. The whole world confesses the completeness of his character. He spoke the final word to man, and man heard his appeal. In the "Sermon on the Mount" we find the inspiration which lifts humanity out of the shadow of selfishness into the light of helpfulness.



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